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BURMA GAZETTEER

THARRAWADDY DISTRICT

VOLUME A

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BURMA GAZETTEER

THARRAWADDY DISTRICT

VOLUME A



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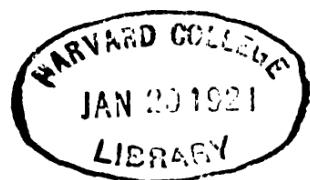
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P R E F A C E.

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BURMA GAZETTEER

THE THARRAWADDY DISTRICT.

CHAPTER I.

PHYSICAL DESCRIPTION.

The Tharrawaddy district, lying between $17^{\circ} 31'$ and $18^{\circ} 47'$ North Latitude and between $95^{\circ} 15'$ and $96^{\circ} 10'$ East Longitude and having an area of 2,863 square miles, forms part of the Pegu Division of Lower Burma. It marches with the Prome District on the north and with the Insein District on the south. To the east the range of hills known as the Pegu Yoma, reaching in places a height of 2,000 feet, divides it from the Pegu and Toungoo districts. The western boundary is the Irrawaddy River, but in the south-west a small area between that river and the Insein district is excluded, to belong to the district of Henzada.

The name of the district is properly a Pali word made up of *sara* (wealth, substance) and of *vanta*, an adjectival suffix showing possession; thus *saravanta* means wealthy, substantial. Following a common rule in Pali which makes names of countries feminine, the feminine form *saravati* was adopted; in Burmese this is written *tharawadi*. The district was probably so called owing to its natural wealth in timber and paddy which sent much revenue to the royal exchequer; Burmese writers say it was so called because of the large amount of revenue it yielded.

The locally-given derivation is somewhat different. It is related that when King Myitkyanzwa and his brother Minyanga came south from Ava to Prome, the king travelling by road and his brother by river, they made a tour through the delta, and after erecting a pagoda at Hmawbi they came to Gangaw which was situated at the present site of Myodwin, some 8 miles east of Gyobingauk. The king ordered his ministers to build a palace there and measures

Deriva-
tion of
Name.

Tradi-
tional
Deriva-
tion.

were taken accordingly to put in posts to mark the site. But the posts would not stand up; so holes were dug for them. But, on digging, the ground was found to be swarming with ants and to have the matted appearance of a loofah. It was impossible to cut through it. The ponnas called upon to interpret this phenomenon said the swarms of ants indicated that the people of that place would be numerous, but just as it was impossible to unravel the tangle of a loofah, so it would be impossible to clear away the disorder that would exist among those people. In order that the work might go on four women must be killed and buried at the corners. Ma Min Ban, Ma Aung Bu and two others were sacrificed. Before she was killed Ma Min Ban called down on the place the curse that no male child born in the place should be of good character, that no good pony should be foaled there, and that nobody there should ever be able to build a really good boat. So, that the people might know that her curse would be fulfilled she prayed to the *nats* that when she was killed her blood might spurt high in the air; and this actually happened. But the work went on successfully enough until the time came to hang the gates; these would not stay up. The ponnas now advised that the first pregnant woman who came along a certain road must be sacrificed. After five years Ma Aung Zan came along and was seized. But when they were about to kill her she begged them to let her stay in jail until her child was born. The plea was refused and then the gates were put up successfully.*

Still the new town had no name and for five more years they waited to find one suitable. At last the ponnas saw a crow come and perch on a gate holding in his beak a fine fat worm and "singing" in his pleasure over such a meal. The crow, said the ponnas, is happy (tha-ya-oo-oo) because it can eat to repletion (wa-o) of this fine fat earthworm (ti-o8). So the place was called "thaya-wa-ti." But the curse has lived ever since. Philologically the legend fails to explain the form Tharrawaddy as it gives the sound of oo and not of q; but the people accept it and so apparently does the Railway Company which always spells the name with a oo.

Configura- tion.

Physically the district falls into four tracts differing materially from each other in the main though each merges gradually into the next. These tracts form four narrow strips lying roughly north and south, all extending through

* Some versions of the story ascribe the curse to Ma Aung Zan and some call her Me Nyun.

practically the whole length of the district. The most easterly consists of the forests on the western slopes of the Pegu Yoma ; much is reserved forest producing fine teak as well as other useful if less costly timber, and more detailed accounts will be found in the sections dealing with forests. To the west of this is a strip of undulating ground in which infertile ridges and bosses of laterite and sand occur amidst the general slope down from the foot of the hills to the alluvial plains. Here cultivation has extended considerably in recent years and little remains which can be cultivated profitably. But the land is still new and not completely broken in, elephant-grass invades the paddy-holdings, and a large number of trees still stand in the rice-fields. Next comes the main strip about eight to twelve miles wide, lying chiefly to the east of the railway but in some places extending several miles across it to the west. This consists of a flat and fertile alluvial plain given up to paddy-cultivation, with numerous villages rendered conspicuous by their groves of mango, tamarind and other garden trees with the fronds of the coconut palm waving above them. Toddy-palms (*Borassus flabellifer*) are fairly numerous in some parts, and, aided occasionally by other trees, relieve the dull monotony of the rice-fields. *Póngyi-kyáungs* and pagodas are rather scarce. Close attention discovers slight variations of level, chiefly due to the low ridges formed by silt-deposits along the banks of the streams. But generally the aspect is that of a level plain with the Pegu Yoma as a dark bank to the east and the Arakan Yoma as a shadowy distant mass to the west serving to emphasise the dull monotony of the plain without affording it any relief.

The last strip is that which brings us to the Irrawaddy—a strip of low land along both sides of the Myitmaka most of which is flooded every year to a depth of from two to fifteen feet. In August or September the floods subside and the outer edges are then cultivated in parts. In the cultivated portion the villages are new and consist of little more than groups of huts huddled together on the higher points generally destitute of shade. The greater part however is unculturable and forms a "laha" (or marsh tract flooded in the rains), its surface gently undulating and consisting of almost pure clay save where the rivers are depositing their silt. There is a network of water-courses, well-defined and deep close to the Myitmaka, ill-defined and shallow where there are depressions big enough to form anything in the nature of a swamp or *in*. The laha

in some places is covered with a dense tree and shrub growth, the typical tree being the *kyi* (*Barringtonia acutangula*). In some places the tree-growth is open and there is nothing but a short growth of grass. Less deeply flooded parts are covered with a dense growth of tall elephant-grass; the presence of this grass may indeed generally be taken as a sign that silting-up is in active progress and that very little more is needed to make the land fit for cultivation. It is said that the *laha* used not to be flooded every year; that the flooding dates back only to 1867 when the Irrawaddy was banded along its right bank. The banding raised the Irrawaddy flood-level and caused a large amount of its water to flow over to the Myitmaka valley and inundate it. This further banked up the tributaries of the Myitmaka and caused them to overflow. But while there are no very clear and precise records of the degree of flooding in early times, there are reasons for thinking that this statement is at least exaggerated. In 1868 it was stated in the Administration Report that this tract was subject to inundation during the south-west monsoon. The Deputy Commissioner in 1876 reported that the greater part of the district had always been a dismal swamp; it is unlikely that he would have made this statement if the floods began only in 1867. Again, in the operations against the outlaw Gaung Gyi in 1853-5 floods seem to have hampered the British forces. Moreover an examination of the silt-deposit affords reason to suppose that the silting-up has gone on for many years and that streams formerly had no proper channels anywhere below the railway; more information on this head will be found in the description of the rivers. Finally the fact that the country remained undeveloped except along the riverbank although it was bordered on the north by the Burmese kingdom and on the south by the Talaing or Peguan kingdom indicates that it offered some difficulties. The truth may perhaps be that by successive deposits of silt the country was just about to be rendered generally secure against the floods from which it had previously suffered when the Irrawaddy embankments caused an inundation from the west against which there was not yet sufficient protection.

Hills.

In the north-west corner of the district there is a small area of slightly elevated laterite running down from the Prome Hills and forming the watershed between the Irrawaddy and the Myitmaka rivers. But the only considerable hills of the district are the Pegu Yoma which form its eastern boundary and a number of short spurs from them

extending a few miles into the central plain. The highest point in the chain (2,000 feet) is in this district in latitude $17^{\circ} 55'$ North, south of this the Yoma branches out into several radiating spurs, amongst which the Pegu and Pazundaung Rivers take their rise, flowing to meet each other and the Rangoon River just below Rangoon. As a result of a rather heavy rainfall upon the soft shales and sandstone which constitute a great part of the range, the slopes of the hills are steep and the valleys sharply excavated; so that although the Pegu Yoma nowhere rise into such imposing masses as the Arakan Yoma they are difficult to cross. A few pedlars cross into the Pegu district with their wares, spending five or six days on the journey, but there are no passes of importance. The forests which cover much of the slopes are described elsewhere. A curiosity of the range is a natural granite bridge called Kyauktada (Burmese "stone-bridge") which stretches for a length of 560 feet over a chasm and is quite destitute of vegetation.

Next to the Irrawaddy which forms the western boundary of the district the largest river is the Myitmaka, known lower down as the Hlaing or Rangoon River and so of considerable interest. In the early days of the British occupation of the province too there was a special interest in it owing to the conflicting descriptions of its source. In a map made by Dr. J. MacClelland, Conservator of Forests at that time, there was shown a connexion between the Nawin above Prome and the head of the Myitmaka, which was accordingly supposed to receive flood-water from the former river. The opinion was also formed by some observers that its bed was merely a disused branch of the Irrawaddy of which it once constituted an important, perhaps even the main, channel. The Administration Report of 1868 states that the Myitmaka branches from the Irrawaddy near the town of Prome. The facts * are such as to make all these opinions credible in the days when the country was less developed. Near the village of Mosa, some six miles east of Prome, is a swamp draining into the Nawin. Only two miles south-east of Mosa runs the Ze, one of the many small feeders of the so-called lake in which the Myitmaka rises. Thus the theory that the Myitmaka was an escape-channel for the floods of the Nawin though plausible was incorrect; there is, as a matter of fact, sufficient rise in the ground to form a genuine watershed.

* The statement in the Insein District Gazetteer, Volume A (pp. 8 and 101), that it rises "in the Tharrawaddy district in the Pegu Mountain Range" seems to be a mistake.

The Ze rises in a lake east of the old city of Yathe some 5 or 6 miles east of Prome and flows together with other small streams draining the eastern slopes of these hills into a lake some 10 miles long and 4 miles wide, lying within the Prome District and known as the Inma. Although 12 feet deep in the rains the Inma is a mere swamp in the dry season. The drainage from this lake or swamp forms the source of the Myitmaka, which flows thence in a general S. or S.S.E. direction. The hills which divide the Ze from the Nawin basin continue for about 32 miles as a low ridge with a general S.S.E. direction dividing the Myitmaka basin from the Irrawaddy. Beyond the end of this ridge there are many channels by which the flood-waters of the Irrawaddy find their way into the Myitmaka or those of the Myitmaka into the Irrawaddy according to the relative heights of flood in the two rivers at the time. The highest connexion of the Myitmaka with the Irrawaddy is the Singaung creek which is navigable only during the rains, and joins the latter some 45 miles above the origin of the Bassein River.

From Mindu in latitude $18^{\circ} 19'$ North to Tangôn, just above Kyaukwa, a distance of twelve miles, the Myitmaka is a broad stream. There are a few fishery-weirs, and masses of floating weed are met with; but timber floats down readily and small boats can navigate this part. But between Tangôn and Kyaukwa, which is shown on the 1-inch maps as situated at the confluence of the Bawbin or Minbu stream with the Myitmaka, the channel has been almost silted up. The main stream of the Myitmaka below this now flows not in its old bed but in a course leaving that bed near Bawdigôn in latitude $18^{\circ} 14'$ North and extending for 12 or 14 miles in a line to the west of the old bed to meet it at Bethalun in latitude $18^{\circ} 8'$ North. This new course is badly obstructed by huge clumps of the thorny bamboo (*Kyakatwa, Bambusa arundinacea*) and dense masses of straggling creeper-like trees; the Forest Department is making a great effort to clear it. All the way down nearly as far as Sanywe, which is opposite the confluence with the Thônzè stream and about 5 or 6 miles from Tharrawaddy, the channel is liable to be choked with jungle and constant care is required to clear this to allow the timber to float down to the timber-station at Sanywe. Theobald, the Government geologist, about 1870, suggested that a channel should be cut near the village of Mosa mentioned above to connect the Nawin with the Ze and so, by leading some of the Nawin floods down the Myitmaka, to

clear and improve the navigation of the latter and render it of still greater service to the transport of timber. Another proposal was to establish a permanent connection between the Irrawaddy and the upper part of the Myitmaka with the same object. Neither of these schemes seems likely to be realised ; the tendency is rather to shut off the Irrawaddy water from the Myitmaka so as to prevent the floods which hamper and forbid cultivation in so much of the latter's basin. It has been stated that the natural channels connecting the Irrawaddy and the Myitmaka are silting up ; and although the proposals to embank the Irrawaddy on its east bank and so exclude all the waters of that river from the valley of the Myitmaka in the Tharrawaddy district have not yet won approval, there are signs that they are on their way to do so

At Sanywe the width of the Myitmaka is about 500 feet and its depth 4 feet, while it has a tidal rise of about $2\frac{1}{2}$ feet more. On account of the numerous shoals and the floating weeds steamers do not ascend above Sanywe, although boats drawing 2 or 3 feet of water go up as far as Tapun, and small boats go even up to the Inma with cargoes of salt and *ngapi*. Below Sanywe the banks are for some way high and sandy.

The principal rivers which descend from the Pegu Yoma to feed the Myitmaka are the Kantha (Taungnyo), Bawbin, Minbu,* Myolè, Gamôn, Minhla Môkka, Bilin and Thônzè streams. These are much alike in physical character. They begin as hill-streams, and in their upper courses run between steep banks in tortuous curves with beds generally 15 to 20 feet below the surrounding country. In the hot season they dry up to form sinuous lines of sand except in short stretches where the water has been bunched up by villagers to form drinking-reservoirs for cattle. In the rains they are swollen to fill their beds, but they confine themselves to those beds as a rule till they arrive at the west of the railway. There they are apt to overflow their banks and sweep in a flood across the paddy-fields, often not only washing away or drowning the plants growing there but also depositing layers of sand which render the soil unfit for paddy-cultivation. Melons, pumpkins, maize, tobacco, tomatoes and other crops which can often be grown on the silt afford some compensation. Some parts too have been raised by successive deposits of silt coming down these

* The Bawbin and Minbu streams unite just west of the railway. The lower stream is known sometimes as the Bawbin and sometimes as the Minbu.

streams from the east until they no longer have to fear the floods from the Irrawaddy and Myitmaka on the west. Another result of this silting-up is that the rivers frequently change their lower courses, so that the maps made in 1880-1884 are now (1915) quite out of date and useless in those parts. Not a single one of the first six streams mentioned carries any of its silt now into the Myitmaka; instead, on arriving at the *laha* described above they form *thègaws*; these are wide accumulations of silt and rubbish brought down by the river which fill up the channel in such a way as to cause the water to flow across in a thin sheet with small channels here and there. Probably the *thègaws* are formed by the constant silting-up of new channels as these are formed. This continuous accumulation of silt must have had a marked effect on the level of the country, and the inference that in earlier times the land in the strip between the railway and the Myitmaka must have been much lower should be remembered in considering the history of the district. Mr. Leete, Conservator of Forests, Pegu Circle, who has made a special study of these streams, wrote in 1914 that "40 years ago all the streams had *thègaws* of sorts close up to the railway-line and none of them had much in the way of permanent channels below it." This conclusion is supported by the records of stranding of logs higher up the river in former years. But they must have had better channels than this implies for the last three or four miles, as some were described in 1880 as navigable in the rains for not very small boats.

None of the rivers from the east is navigable to any extent except the Thônzè stream which is navigable for boats carrying 200 baskets of paddy—about 4½ tons' burthen. The principal use of these streams, besides carrying a water-supply to the village in their courses, is as carriers for timber cut in the forests on the Pegu Yoma. The formation of *thègaws* however and the general tendency to silt up has caused much trouble to the Forest Department, whose logs are apt to be carried off and distributed over wide areas or to be buried in a mass of sand. For example in 1914 some 3,600 logs were counted in and about the Kantha stream alone; and there must be many more which though exposed escaped notice in the counting or were buried out of sight. The stranding and jamming of logs increases the silting action, and the cultivators and fishermen both blame the Forest Department for the losses they have suffered in recent years. As the fishermen erect weirs which by stopping rubbish cause the streams to silt

up, there is also room for the countercharge which blames the fishermen for the present difficulties. It appears however to be possible to improve the rivers for floating timber and at the same time to improve the conditions of cultivation near them; though only at the expense of the fisheries.

An account of the lower course of the Kantha stream, as being that which has received most attention in the past, may be of some interest. It is known in its higher reaches as the Taungnyo, and it forms part of the boundary between the Prome and Tharrawaddy districts. It was said in the British Burma Gazetteer of 1880 to be navigable by small boats for some distance in the rains. Its sources are on the western slopes of the Pegu Yoma between the Pundaung and the Taungnyo spurs, and the land near its upper course forms one of the finest teak-tracts in the district. As far down as the railway-crossing the river is confined to a deep bed and has a regular behaviour, but below this it has always been a source of anxiety and loss. The first bridge across it on the Tapun-Paungdè road near Labagin, constructed during the disturbances which accompanied the establishment of British administration in those parts, was carried away by timber and refuse brought down from the forests during heavy floods and had to be replaced in 1874-5 by a bridge consisting of two central spans each of 60 feet and two of 12 feet constructed on wooden piles at a cost of Rs. 7,920. The river then silted up in the middle and flowed round both ends of the bridge cutting it off from banks and rendering it useless so that it was removed. In those days the river flowed straight on to the south-west to join the Shwele stream. But in 1891 just after crossing the Public Works Department road the river broke back, re-crossed the road, and went away to the south-east, leaving nearly dry the old bed, to which it has never returned. The new stream flowed past Myenu to meet the Tapun stream somewhere near Singyaung. After four years, timber and sand blocked up this channel just north of Myenu, and a new stream burst south-eastwards at a right-angle and met the road about a mile-and-a-half north of Tapun, and very little water from the Kantha flowed into the Tapun stream after that. Arrived at the road, the Kantha turned at right angles down the borrowpit on the east side of the road for about 700 yards and then escaped under the road at a small bridge about 18 feet wide, turning again at right-angles to do this. In 1911 a big

The
Kantha
Stream.

flood brought down a number of logs and a quantity of rubbish which blocked the borrowpit-channel. The stream instead of turning down the borrowpit now drove straight ahead through the road. An attempt was made to force the stream back into the borrowpit, which was cleared; but nothing was done to the two right-angle turns or in the direction of enlarging the small bridge. In November 1913 a big flood brought down a thousand logs or more. The small bridge was immediately blocked up with logs, sand and rubbish and the borrowpit-channel almost completely filled in. The river as in 1911 burst across the road making a gap about 80 feet wide through which flows a river which is about a foot to 18 inches deep in December and dries up towards the end of the hot weather. After about a quarter of a mile this channel, known as the Tagyo, begins to twist about and send off branches. In the later part of the monsoon the stream spreads all over the surrounding country depositing sand everywhere. Eventually the channel finds its way into the Tapun stream, which runs in a course full of sharp turns for a mile and then forms a *thègaw*. At Tapun the stream is 100 feet wide and 5 feet deep; in the *thègaw* it is only 25 feet wide and 1 to 2 feet deep. Below this the ground is low and the *laha* begins. The channel through the *laha* to the Myitmaka is about 4 miles long, and varies greatly in width, in places being only ten feet; the depth gradually improves. In the last mile or so of the channel there is no sand, only clay. Within the *laha* is a large fishing-camp known as the Pöngyi-ye weir; the smallness of the channel in the neighbourhood is probably due to the construction of fishery-weirs at every few yards by the people of this camp. Improvements of the channel are now contemplated by the Forest Department in the hope of salving the many valuable logs stranded all round the various courses of the river as well as of facilitating the floating of logs in the future.

The main causes of the deterioration of these streams are:—

- (a) obstructions to the flow and diversions of water by fishery-weirs,
- (b) diversion of water by irrigation-channels,
- (c) obstructions caused by the uncontrolled floating of timber, and by uprooted trees, roots, snags, and rubbish generally,
- (d) deposition of silt,
- (e) flooding by the Irrawaddy.

Most of these seem to be remediable, and as has already been stated, action is being taken or is likely to be taken to deal with them.

The Irrawaddy is of importance to the district chiefly on account of the floods it engenders. The greater part of the land between the Irrawaddy and the Myitmaka is flooded during the rains by the overflow from the former and is unculturable during that season as a result. Partly because of this additional demand upon its carrying powers the Myitmaka is unable to carry away all the water coming to it from the east, and there is accordingly a strip of flooded land varying in width up to 5 or 6 miles to the east of the Myitmaka in which the parts nearest that river are unculturable and in the parts more distant cultivation is precarious. The tributaries of the Myitmaka coming down from the Yoma cause some flooding by overflowing their banks, but this is partly due to the banking up of their water which results from an overfull Myitmaka; while the same cause prevents the flood from draining away. Formerly cultivation was practised on a fringe of high land along the bank of the Irrawaddy and several towns and large villages existed some of which remain now much diminished. Mingyi, once the headquarters of the district and now a small village, is perhaps the most striking example of these. But in 1863 on the proposal * of Colonel Short continuous embanking of the right bank of the Irrawaddy was undertaken and this had for one of its immediate effects a rise varying in places from a few inches to 5½ feet in the flood-level of the river, which threw this stretch of land on the unprotected side out of cultivation. But even in 1867, long before the embankments on the right bank had developed sufficiently to have this result, Colonel Fraser, R.E., Chief Engineer, had proposed to embank the left bank also and in connection therewith to embank the right bank of the Myitmaka. The usual objections to double embankment were put forward and an enquiry was undertaken with the object of devising a general system of embankments for the whole delta in which the question of the double embankment was of course of great importance. Colonel Stoddard, who began the enquiry, practically confined himself to the question of the Tharrawaddy embankment. He advocated

The Irrawaddy.

* These were proposals for embanking continuously. But there had been embankments before, notably that just below Hengzada which was destroyed and rebuilt in 1860 and 1861, and burst again in the rains of 1864.

the construction of this and further recommended the construction of a navigable irrigation-canal for the area to be protected by it. The canal was to take off from the Irrawaddy near Prome and was to render the Hlaing river navigable from Rangoon to Prome. Colonel Stoddard's data were not sufficient and Mr. Robert Gordon continued the enquiry for over ten more years. In 1880 he again recommended the construction of an embankment on the Tharrawaddy side to be carried out by stages. The first step was to make a light embankment from Yandoon up to Tharrawaw (where the Letpadan-Henzada railway now reaches the river) and to close the creeks north of Tharrawaw by which the water from the Irrawaddy escapes into the Myitmaka. The Government of India was not prepared to reclaim the land at the expense of its water-communications, and moreover feared the effect which the diversion of so much water from the Myitmaka might have upon the port of Rangoon. The scheme was then dropped and in its original form it has not been reconsidered. In 1882 the Local Government forbade the construction of any embankments on the left bank of the Irrawaddy. But short pieces of embankment were constructed, joined up, and extended step by step, partly by the Public Works Department, partly by Civil officers, and partly by villagers, until in 1899 it was found that the Irrawaddy was practically doubly embanked from Tharrawaw to Yandoon, and in 1901 it was stated that on the left bank of a total of 113 miles some 60 miles had been embanked contrary to the Government's orders. The embankments on the other side had been raised from time to time to keep pace with the supposed rise of flood-level caused by this double embankment; as lately as 1908-09 all the embankments on the right bank raised a freeboard of 3 feet over the height to which it was estimated a flood equal to the great 1877 flood would rise under the altered conditions. In October 1901 as a result of the report mentioned above, the Local Government forbade the construction of any more embankments on the left bank. But in 1902 the construction of the Monyo-Minhla road was sanctioned and in 1903-04 was carried out. The road ran at right-angles to the Irrawaddy across the spill of the river and across the Myitmaka; but it had a gap of $\frac{2}{3}$ miles between the third and the sixth mile from Monyo. In 1902-03 was constructed the railway from Letpadan to Tharrawaw, also crossing the spill of the Irrawaddy. In 1903 the railway was opened to traffic but the line was breached. In 1905 it was again breached.

Having been greatly strengthened it withstood the floods of 1906.

The unusually high floods of 1905 led to the appointment of a special committee to enquire into the subject, which recommended the removal of the Monyo-Minhla road, of the embankment from Aingtalôk to Paukkôn, and of 8 miles of the railway from Tharrawaw. In the committee's discussions it was not supposed that any alteration of flood-level north of Henzada and Tharrawaw had taken place. The question of the railway-line was settled by providing largely increased waterways; repairs to the road from Monyo west of the Myitmaka were forbidden; and in 1909 it was directed that no village embankments should be allowed to exceed the height of the 1906 flood-level. At that time the embankments on the right bank of the Irrawaddy in the Tharrawaddy district were as follows:—

(1) The Yegin embankment—really an embanked road $2\frac{1}{2}$ miles long constructed soon after the annexation of the province by the Deputy Commissioner to connect Mingyi, his headquarters, with its port of Yegin;

(2) The Thayetchaung embankment, about $14\frac{1}{2}$ miles long, reaching from Aingtalôk to Paukkôn, constructed in 1900 from funds collected among the villagers and administered by the Civil officers.

In 1912-13 the construction of a new embankment from Aingtalôk to Paukkôn some little distance inside the Thayetchaung embankment was begun, and in some places this was found to stand as much as 3 feet above the prescribed flood-level of 1906. Up to the present no action has been taken to enforce the prohibition orders of 1906 against this undertaking.

In 1914 Mr. C. G. Barnett, who had been Executive Engineer at Henzada, published a Note upon Protective Embankments in the Irrawaddy Delta in which he gives reasons based upon measurements for supposing that the Irrawaddy has cut its channel deeper as a result of being embanked and that if with proper precautions it were embanked upon both sides it would continue to adjust itself to the conditions without danger to the land near it. It should be noted that Mr. Theobald, the geologist, over forty years ago indicated a similar conclusion. In discussing the geological character of the Irrawaddy delta he stated his opinion based upon geological considerations that the river deposited an abnormally small amount of silt in the upper part of the delta and that it tended rather to maintain its course through the old marine alluvium and to carry its

sediment out to be deposited in the Gulf of Martaban. If this tendency of the river to enlarge and deepen its bed to accommodate additional water confined to it is definitely established it may be expected that the Tharrawaddy side will be embanked before many years have passed ; and that this, besides rendering a large extent of flooded land culturable, will remove the precariousness that now attaches to the harvest in much that is already cultivated. In the eight years 1906 to 1913 the average area of crops planted in the Tharrawaddy district was approximately 470,000 acres of which an area of 32,700 acres annually was destroyed by floods. In years of severe floods the crops on some 50,000 acres are liable to destruction. Successful control of the river would not only prevent these floods but would diminish the flooding in the Insein district and by improving the conditions in the Myitmaka basin would also remove some of the difficulties experienced by the Forest Department and prevent the deposition of sterile sand by the overflow of the Myitmaka's tributaries.

Geology.

In the Pegu Yoma we have perhaps as simple an instance as possible of the formation of a great mountain-chain through the direct operation of lateral pressure causing a folding and as a result therefrom, the elevation of sedimentary beds. There is a complete absence of any complex system of faulting on a large scale or intrusion of igneous rocks whether in a solid or fluid condition. The beds belong for the most part to the series of beds generally known as the "Pegu Group," which in age is roughly Tertiary—covering probably the whole of the Miocene and Pliocene epochs—and in superficial extent is the most important group in the province. They consist chiefly of soft shales and sandstones, and although many of the beds are rich in fossils there is often a great thickness of beds in which fossils are either absent or ill-preserved. Next to the Pegu Group in recency comes the Fossil-wood group of Pliocene age, so designated from its uppermost member from which the fossil-wood so plentifully dispersed through the gravels of the Irrawaddy was originally derived. This group occupies at present a very restricted area compared with its former limits which are known to have reached at least as far south as Rangoon. But the occasional discovery of partly-rolled pieces of fossil-wood in the gravelly detritus which covers up the lower beds of the group furnishes evidence of its former existence. Theobald, who first worked out the geology of Pegu, mentions as of special interest one such piece occurring in the Tharrawaddy district embedded

in a mass of confused detritus "between the Okkan and Thonzè streams."* This piece consisted of a log of silicified wood some 4 feet in length, but its position was not recorded more minutely. Nowhere in the Tharrawaddy district is fossil-wood so plentiful now as in the Prome and Thayetmyo districts, but the occurrence of such a large piece, too large to be regarded as transported from a distance, indicates the former extension of the bed to at least as far south as this neighbourhood.

Above the fossil-wood group come the older and the newer alluvial beds. New alluvium is of comparatively small extent. Indeed the Irrawaddy is somewhat remarkable for the small amount of silt it deposits, and the following explanation of this given by Theobald † is of importance as accounting for the kind of soil generally found in the Tharrawaddy district. The first showers of rain fill the numerous depressions scattered about the country and these gradually enlarging submerge the country before the turbid floods of the rivers have risen to a similar height. The ground adjoining the river is generally higher than the flooded interior—the ordinary rainfall of the district is sufficient to produce this effect—while the low lands receive in addition considerable though irregular supplies through streams which, pouring out from the hills, diffuse themselves over the country and lose themselves in the plains. A vast quantity of sand is swept down and forms a sort of encroaching talus margining the plains; but the somewhat depurated water mixed with the pure rain-water of the plains forms a body of water very limpid and free from sediment though often tinged with brown from decaying vegetable matter. The turbid waters of the large rivers now rising top their banks, but their course is arrested by the limpid water of the plains, and they may often be traced holding on their course without mingling with the other, the contrast in colour serving to distinguish them, and this balance of power of course tends greatly to reduce the deposition of silt to a minimum over the inundated plains and restrict it to the immediate neighbourhood of the larger streams. It is not intended to declare that the flood-waters which cross the country leave no deposit, but to emphasise rather the comparative insignificance of the area of the newer alluvium in the Irrawaddy valley, including the Tharrawaddy district. The thickness of the new alluvium is seldom as much as 3 feet on the river banks; farther

* Records of the Geological Survey of India, Vol. II, 1869.

† Records of the Geological Survey of India, Vol. III, 1870.

from the river the thickness is less because a great part of the silt has already been deposited at the edge. The greater part of the central plain of the district consists then of the older alluvial clay which is of a homogeneous character, somewhat arenaceous, with thin layers of sand dispersed through it, and to which a marine rather than a fluatile origin is to be ascribed. This older clay rests upon a bottom bed of sand or gravel varying much with the locality and made up partly of the detritus from the nearest rocks, partly of gravel derived from more distant sources. Along the skirts of the Pegu Yoma a belt of sandy deposits, laterite in places, occupies the position of the coarser gravels to the west. These deposits are supposed to have been derived from the denudation of the incoherent beds of the fossil-wood group, and are identical with the beds which completely hide the older deposits near Rangoon. Apparently the Gulf of Martaban formerly stretched up what is now the Irrawaddy valley,* and the drainage from the peninsula-like land which now constitutes the Pegu Yoma formed along its coast-line a talus of sandy detritus while the deposits within the Gulf itself formed the older alluvial clay which now constitutes the level plains of the district. Within the sandy talus laterite is of frequent occurrence, appearing thus as a basal member of the older alluvium covered with a sandy soil and clothed with *indaing* forest. In many places the laterite is of fair quality, not so good as that near Sittang, but considerably better than that generally found in the delta districts. There is not however sufficient iron to permit of smelting for this metal ; the stone is useful only for rather inferior road-making.

From the geology of the district it will be seen that there is no limestone, no good road metal and no good building stone to be found. No minerals of any value occur and from the formation it is clear that there is no probability of any ever being discovered. The ordinary alluvial clay is used for rough pottery ; laterite for roads is extracted in the dry weather as a subsidiary occupation.

The Tharrawaddy *Yazawin* (page 23) mentions some very productive ruby mines south-east of the city of Myodwin ; silver, tin and lead up the Bawbin *chaung*, which

* Burmese history also declares that this was the case. In the *Maha Yazawin* (as quoted by Colonel Spearman) it is said that Gaudama visited Burma accompanied by 500 Rahanda, flying through the air on the wings of the wind. Descending the Irrawaddy he arrived at the hills opposite the spot where now stands Prome. "Immediately to the south-east was the sea."

is said to take its name from these minerals; copper up the Kyeni *chaung*, which is said to be a feeder of the Bilin (Letpadan Township); and diamonds, sapphires, rubies and cat's-eyes in some hills not identifiable but apparently in the region of Teinmyôk.

The forests which formerly covered the district have ~~Forests,~~ been much reduced of course during its development by agriculturists. In the parts of the flooded area which are too severely flooded to be cultivated there are the ordinary savannah forests distinguished by the luxuriant growth of "kaing" grass (elephant grasses) and including such trees as *Butea frondosa* (*pauk*), *Ficus fistulosa*, *Terminalia crenata*, *Dalbergia cultrata*, *Dalbergia purpurea*, *Lagerstroemia flos reginae* and *Strychnos nux vomica* (*kabaung*), the typical tree being *Barringtonia acutangula* ('*kyi*).

East of the savannah forests is the cultivated area from which forests have nearly disappeared. Considerable areas of low deciduous forest were formerly reserved in this tract chiefly as fuel reserves both for ordinary uses of fuel and for the use of the railway. After about 1880 when coal came into general use on the railway these areas were much reduced but a few patches of reserved forest remain, and are in character much the same as the *in* forests skirting the hills would be without the *in* tree.

The clay of the fossil-wood group and the sandy beds of the same group offer good instances of the connection of particular soils with particular kinds of vegetation. In the area of the fossil-wood sands the most prominent tree is the *in* (*Dipterocarpus tuberculatus* and *grandiflora*); and this tree so commonly affects sandy soils that the Burmese apply the name "*indaing*" to all such soils, whether within the limits of the fossil-wood sand proper or the zone of detrital accumulations skirting the hills; and though of course *in* trees are found on other descriptions of soil, yet it is on this sandy belt that the *in* flourishes most vigorously—probably because while it is well suited by a sandy soil, it is subject there to less competition by other trees. The *thitya* (*Shorea obtusa*), *Ka-nyin* (*Dipterocarpus alata*) and *ingyin* (*Hopea suava*) equally affect the sandy *indaing* though not in such numbers as to characterise the forests. These trees however do not succeed on the clay beds; they are miserably dwarfed there, and these beds seem from some cause or other to be unfavourable to forest growth. Theobald in 1869 suggested that this was due to the hygrometric qualities of the clay rather than to any injurious ingredient in it, and that if properly irrigated it would give

better promise to the cultivator than the densely wooded sands to which it offered so unpleasant a contrast.

Bamboos are not much developed in the *indaing*; a striking contrast is not unfrequently afforded at the junction of the *indanig* with the older beds, on which bamboos flourish with great luxuriance.

The *in* forest extends through the district from north to south, here and there having patches of "mixed forest" which differs from low forest chiefly in the absence of the dense grass covering and in the presence of considerable quantities of teak especially near the margin. East of the *indaing*, extending to the foot of the Yoma in the region of low undulating hills, is a region of "mixed forest" varying in breadth from one to ten miles, rich in teak, whilst the forests on the spurs and ridges still further east are the finest and by far the most extensive. In the north the Taungnyo and the Minbu streams and further south the Minhla, Môkka and Bilin streams traverse a rich forest country. Besides teak the commoner trees are Xylia dolabriformis (*pyinkado*), Dillenia parviflora (*lingyaw*), Lagerstroemia flos reginae (*pyinma*), Lagerstroemia tomentosa, Homalium tomentosum (*myukchaw*) and various species of Sterculia.

The principal timber trees are :—

Names.		Remarks.
Systematic.	Burmese.	
<i>Tectona grandis</i> <i>Xylia dolabri-</i> <i>formis.</i>	Kyun (teak) Pyinkado ...	Timber dark coloured, dense, strong and durable; but too hard to be easily worked. Used for house-posts, bridge piles, railway sleepers, boat anchors, ploughs.
<i>Dipterocarpus</i> <i>tuberculatus.</i>	In ...	Timber light brown, good for house building especially for posts
<i>Dipterocarpus</i> <i>alatus.</i>	Ka-nyinpyu ...	Timber light brown and of great size and strength; used in boat building; furnishes a useful oil.
<i>Dipterocarpus</i> <i>turbinatus.</i>	Ka-nyinni ...	Found towards the south; furnishes an oil which can be used as a varnish in unexposed situations.

Name.				Remarks.
Systematic.	Burmese.			
Acacia catechu	Sha	...		Furnishes cutch. Grows in abundance towards north ; never found together with dipterocarpus turbinatus but furnishes a similar varnish.
Sterculia ...	Letkôk	...		Yields a gum similar to tragacanth.
Terminalia macrocarpa.	Taukkyan	...		Timber dark brown ; used in house building ; strong but not very durable.
Lagerstroemia Flos Reginae.	Pyinma	...		Wood red, strong and adapted for house building but more especially for piles and in situations under water.
Hopea suava ... Dalbergia cultrata.	Ingyin. Yindaik	...		The heart wood is very durable, too heavy to float ; used for plough and cart poles.
Careya arborea Barringtonia (chiefly <i>B. acutangula.</i>) Odina Wodier	Banwe Kyi, Kyi	...		Wood red ; used for carts. Bark good for tanning. Wood red, hard and of fine grain ; used for carts.
Pterocarpus macrocarpus. Pentace Burmanica. Schigochiton grandiflorum. Butea frondosa	Nabè Padauk. Thitka. Thitkado. Pauk.	...		Bark good for tanning. Also yields a gum from which an inferior varnish can be made.

Game is not plentiful in the Tharrawaddy district ; the **fauna**. western slopes of the Pegu Yoma seem to be less attractive to animals than the eastern slopes in the Pegu and Toungoo districts. Elephant, bison, saing, sambhur and thamin are occasionally met with in the Yoma and in the reserved forests, and bears in the Yoma towards the north ; tigers and leopards are found in the forests on both sides of the railway, tigers being numerous on the western side. Small deer and pig are found throughout the district though not in large numbers. There are a few good sniping grounds but most are infested with leeches ; and no stretches of water are much frequented by geese and duck.

But all the birds usually found in Lower Burma are to be found in Tharrawaddy though no systematic study of them has yet been made. Amongst snakes the cobra and the Russell's viper are the commonest. The latter is very common indeed in the north of the district which seems to be quite a favourite home for the species; several deaths occur every year at harvest from bites by this viper although the reapers often wear boots made of leather or of plaited strips of palm leaf. Of late years a system of rewards for killing snakes has been in vogue. One may be sceptical as to the value of this method; but in a few localities the writer was informed by the villagers that the snakes had been so much diminished that crops had begun to suffer from the attacks of rats whose numbers apparently the snakes had formerly kept down. The reward was originally in 1910 eight annas for each full grown snake killed but this had to be reduced as there was reason to suppose snakes were bred to get the reward. In the year ending March 1912 16,480 large and 14,771 small snakes costing Rs. 29,461 in rewards were brought in. The reward was reduced to two annas *per* snake, but then no rewards were claimed. In 1913 new orders sanctioned eight annas reward for every female cobra with eggs or Russell viper with young and for broods of young vipers; the result is now being watched. But the tendency is to accept the opinion expressed by the Government of India in 1889 that the money would be spent to better advantage in clearing the jungle in which the snakes hide near the houses. In 1859-60 in the early days of the British occupation elephant catching was practised in Tharrawaddy by the Burmese method of hunting with tuskers. But few or none over six feet in height were obtained, and animals under seven feet were of no use for commissariat purposes. The stockade was thought too expensive and uncertain to be tried, and the practice was given up.

Climate

The climate is comparatively mild though in the plains the thermometer rises at times to 103° in the shade in April which is the hottest month. May is more trying on account of the atmospheric conditions just before the rains begin. Rain generally falls towards the end of April, but showers are fitful and comparatively rare until the end of May or the beginning of June, when the monsoon begins in earnest. The showers then are frequent but not generally very heavy; indeed the difference between the 84 inches rainfall of Tharrawaddy and the 97 to 100 of the neighbourhood of Rangoon represents probably the different

intensity of the showers. There are generally showers every day with little interruption until October, when the showers get scantier and less frequent till they die away completely in November. There is a slight fall of rain occasionally about Christmas-time and sometimes too at the end of March. The rainfall is moderate throughout but it is considerably less in the north than in the south, as can be seen from the average rainfall for the last eighteen years or so at the recording stations which are here arranged in order of latitude from south to north—Tharrawaddy 84 inches, 112 days; Okpo 72 inches, 99 days; Monyo 66 inches, 93 days; Gyobingauk 66 inches, 95 days; Zigôn 60 inches, 94 days; Tapun 51 inches, 83 days; Nattalin 55 inches, 85 days (average for 11 years). This rainfall is sufficient and certain, and timely; serious scarcity from lack of rain is accordingly unknown though damage to crops from scarcity of September rain sometimes occurs. In October as usually in Lower Burma the air is close and oppressive but towards December the cold weather begins. From that time on to February the climate is pleasant enough for Europeans; the nights are cool enough for warm blankets, the days are not unpleasantly warm. Heavy mists often prevail in the early morning and the heavy dews keep the grass wet until nine o'clock. In March and April the dews still continue but mists are rare save near the hills and the Myitmaka; the dampness of the air however makes the comparatively mild temperatures trying to some people in spite of the relief afforded by the north and north-east winds which blow at this season. The nights are cool enough for a healthy person to sleep without a punkah all the year round unless the habit of using a punkah at night has been acquired. On half a dozen nights in the rains it may be close until midnight or so, but a shower is sure to come very soon to cool the air. Mosquitoes are comparatively rare even in the wilder parts in the dry weather but swarm during the rains everywhere save in a few spots in which special efforts have been made against them; in many villages smoky fires have to be kept all night around the cattle sheds to enable the animals to rest. Various insects annoy at the beginning and to a less extent at the end of the rains, but they are not so numerous, so varied, or so persistent as they are further south in Hanthawaddy. The worst pest is probably the domestic servant who in Tharrawaddy is rarely satisfactory, those brought from other parts of the country are often sick and generally deteriorate, while the local species

whether Burman or Madrassi are not successful at this kind of employment.

Generally, although there is nothing specifically unhealthy in the climate, and some—including European children—seem to thrive in it, there is a tendency to a lack of "tone" and steady deterioration with many. Near the hills there is a good deal of malaria and many who visit those parts bring away the parasite in their system which suffers accordingly. There is in the people a peculiar slackness exhibited in a lack of reliability and of a sense of responsibility and by the acquiescence in a low standard of work which may be due to malarial influences and probably plays a part in connection with the criminal character of the district.

CHAPTER II.

HISTORY AND ARCHAEOLOGY.

Part I.—Burmese Times.

Scantiness of History.

The history of Tharrawaddy district includes no crowded hour of glorious life; the district was almost literally a country without a name until the middle of the 19th century when it was occupied by the British. Throughout the wars which ravaged Burma in early times Tharrawaddy played no special part. The armies seem to have travelled generally by the river and to have been occupied chiefly with its right bank.

The Wars between Burmans and Talaings.

In 1386 Minkyizwa, King of Ava, attacking Pegu sent out two columns, one to move down the valley of the Sittang, the other through Tharrawaddy down the valley of the Hlaing or Myitmaka.* This invasion being unsuccessful it was renewed the following year and again a force went by land down the Hlaing valley as far as the town of Hlaing, where they were defeated by the Talaings under Razadirit and pursued as far as Prome, but no permanent occupation of Tharrawaddy was effected by the victors. From references in the Hmannan history it would appear that about 1389 there were Talaing outposts at Hlaing and Hmawbi while one Talaing frontier post was at Gudut. Two years later however it would appear that the Talaings had withdrawn from the district, for it is

* This may perhaps be the King mentioned in the legend of the origin of the name of Tharrawaddy in Chapter I.

related in the abovementioned history that the people of Prome found a white elephant in Tharrawaddy and the King of Ava came down to enquire into the matter. Thereupon Razadirit advanced with large forces and the King of Ava withdrew after protesting the peaceful nature of his designs. At this time Tharrawaddy was apparently disputed territory but the Talaings soon gave up all claim to it for in 1402 we find Tharrawaddy mentioned as the headquarters of a *myoza* subordinate to Ava. Three years later the frontier between the two kingdoms of Pegu and Ava was defined and the line of demarcations was drawn from Tabintayaung on the west to Sapaka on the east. In 1409 Tharrawaddy was fortified by Mingaung of Ava, and Razadirit was withheld at Banan.

About 1445 Sin-mya-shin, *Myoza* of Prome, probably taking advantage of the Chinese invasion of Burma in that year, declared his independence and founded a dynasty. This petty kingdom, like the kingdom of Toungoo, was a constant source of trouble to the kings of Ava and it is probable that from this date Tharrawaddy was subordinate to Prome.

Connection with Prome.

In 1485 Thadominzaw, an uncle of Dutiya Min Kaung, King of Ava, was governor of an area called Tharrawaddy. He rebelled against Min Kaung and advanced on the capital, but meeting the King at Magwe he was persuaded to retire; but he declared himself King of Prome. The Shan invaders under the Mohnyin *Sawbwa* tried in 1501 to make Thadominzaw King of Ava but he could not maintain his position. Thus Tharrawaddy became a portion of the kingdom of Prome till that was annexed by Bayin Naung in 1542-43 to the kingdom of Toungoo. Tharrawaddy seems then to have become a principality; in 1578 when Bayin Naung had become Emperor under the title of Shinbyumashin the Viceroy in Chiengmai was a Prince Tharrawaddy. From this time until the conquest of Alaungpara (Alompra) in 1753 the principality remained part of the Talaing kingdom of Pegu.

In 1819 the Burman King Bodawpaya, a son of Prince Alaungpara, died at his capital Amarapura and was succeeded by his grandson Bagyidaw, who contemplated an invasion of England and is known chiefly to the British as the King of Burma at the time of the First Burmese War. The humiliation which he suffered at the end of that war affected his reason and he became insane. A commission of regency of four persons was formed including the queen's brother Minthagyi "formerly a fishmonger"

(as Colonel Spearman in his Gazetteer of 1880 is always careful to repeat) and presided over by the king's brother Prince Tharrawaddy. But palace intrigues made the position of Prince Tharrawaddy too dangerous for him and he withdrew from the capital and lived in various places on and near the Delta, brooding over the troubles which had arisen from the supremacy of the fishmonger, and reflecting that it was mainly due to the latter's counsel being followed instead of his own that the provinces of Arakan and Tenasserim had been lost to the English, the "uncivilised foreigners" as he had called them. It may be remarked that Prince Tharrawaddy's endeavours first to avoid a war with the British and afterwards to come to terms were probably due to the fact that his own territory lay in the direct line of advance of the British from Rangoon to the Burmese capital. But this would not make the failure in the war the less irritating ; and when in addition he found that the fishmonger was ready to go to a dangerous length in his enmity, Tharrawaddy came to his palace at Myodwin in the Tharrawaddy district and took measures to raise an army. He was fond of boat-racing and made this a cover for assembling round him at Myodwin a strong bodyguard, while he secretly collected some 8,000 muskets. In 1837 Minthagyi sent a party to arrest one of his followers in his palace ; Tharrawaddy, angered at this, marched with his followers to Sagaing and thence to Môksobo,* the home of his great grandfather, Alaungpara, and raised the standard of a successful revolt. The capital was moved back from Ava to Amarapura and Tharrawaddy district played no further part in the events of his reign. The character usually ascribed to Kônbaungmin, as King Tharrawaddy was called, is full of contradictions ; the truth appears to be that he was originally an unusually strong, liberal and generous man, but after his accession he indulged in intoxicating drink, and his character and mental powers then rapidly deteriorated until he became insane. It was in this latter phase that he earned the name he bears for vindictive cruelty. King Tharrawaddy has been blamed for collecting bad characters in Tharrawaddy district, and the criminal taint which its inhabitants are reputed to possess has been described as a legacy from his followers. It is probable however that these all followed him to Môksobo and Amarapura in the hope of booty and rewards and that very few remained in Tharrawaddy. Moreover the people had this reputation before his time and other explanations are available.

* Shwebo.

Part II.—The First Pacification.

In the war of 1825 the British sent up two columns, one by the river and one by land, to meet at Tharrawaw, but nothing of note occurred anywhere within the present Tharrawaddy district. In the war of 1852 there was again no action within this area; even on the river all the Burmese resistance was from the right bank. But the defeat of the incoherent Burmese Government was not the same thing as the subjugation of the province. After the fall of Rangoon and the dispersion of the King's troops all the Burmese who had been called south for the defence of the provincial capital fled towards Prome, some in the train of the Viceroy, others alone. Among the last was Maung Po, brother of four of the King's cabinet ministers and governor of Tharrawaddy and Myanaung. He prepared himself for defence and attacked weak parties. He also put ten men on the river to pillage passing canoes. The present Tharrawaddy district however had been openly in favour of the British as early as September 1852 except in the northern portion. The people in various places showed a friendly disposition, and when Maung Po retired to Myanaung in October 1852 nearly the whole river line became safe. By the end of February 1853 the neighbourhood of Sarawah was declared free from marauders, although the Sarawah division had always been in bad order even in Burmese times. But in the principality of Tharrawaddy serious disturbances soon arose which in quelling afforded perhaps the most difficult task the British experienced in the annexation of the country. The principality in Burmese times had been divided into two counties, North and South, having a *Myowun* and *Sitkè* at Monyo and another *Sitkè* at Mingyi or Laukazeya. These were divided into 20 circles some under *thugyis* some under steersmen; there were also four royal forests under conservators. There was a division of authority between the *Myowun* and the *Sitkès* and appeals to the Prince of Tharrawaddy had not improved this. As a result the people had always been disorderly and rebellious; discontent, disunion and anarchy had often prevailed. Accordingly it was not to be wondered at that Captain Smith, the first Deputy Commissioner, found a local struggle going on between four armed parties for the control of the principality and for the right of collecting revenues. The strongest of these was that of Gaung Gyi who had formerly been *thugyi* at Tapan. He had failed to pay in his proper

Distur-
bances
after
Second
Burmese
War and
history
of Gaung
Gyi.

quota of taxes and during the war refused to furnish a contingent for the Burman army at Prome. But the advance of the British allowed the Burman generals no opportunity of reducing Gaung Gyi to obedience. A brother-in-law of Gaung Gyi named U Talôk, described in 1853, as "upwards of 80 years of age but still full of energy, rapacious and perfidious," was in 1852 the *Myowun* resident at Monyo. He was continued by the British as the Myoôk there, and he promised Gaung Gyi to obtain for him the government of Myanaung. Failing to receive this Gaung Gyi marched on Monyo at the beginning of March at the head of a number of the disbanded Burmese police and troops, large numbers of whom had been left by the Burmese in their retreat. These were ready for any undertaking which gave a fair promise of plunder and followed Gaung Gyi readily. U Talôk fled to Okpo on the other side of the Irrawaddy and Monyo was destroyed. At the first sign of disturbance, Captain Smith, the Deputy Commissioner, had summoned Gaung Gyi to Henzada intending to give him an appointment; but he declined to obey. Instead, making Tapun his headquarters and receiving secretly support from the Burmese Court, he set up a Government of his own in Tharrawaddy. The thirty odd *taikthugyis*, chiefly original incumbents of those offices under the Burmese government, who had been re-appointed by U Talôk, were confirmed in these posts by Gaung Gyi if they supported him, the others he drove away. He also appointed "steersmen" who robbed boats in the river and villages near the bank. Gaung Gyi's brother, Gaung Gale, who had formerly assisted him in his *thugyi*'s duties, assisted him in his new enterprise chiefly on the river, and was often credited with being the more able of the two. Some degree of organisation was established and it would perhaps be more correct to regard Gaung Gyi at first as the head of an army competing with the British for the possession of a province abandoned by the Burmese Government than as a rebel or outlaw as he is generally described. In the attack upon Monyo in March he had 1,500 men of whom 600 were armed with muskets. In April his main body consisting of 600 men was at Yuntalin about 20 miles from Monyo with an advance guard of 300 stationed at the distance of eight or nine miles from that town; two other bodies of 600 each were between Monyo and Mingyi and another of 100 was reported to be in that neighbourhood. Gaung Gyi had control then of practically all the Monyo township. He

remained quiet however until the 24th May when he suddenly crossed the Irrawaddy and committed depredations in Kanaung and Okpo. The Deputy Commissioner began to be discouraged. He wrote in June that since the destruction of Monyo in March the depredations of thieves and burglars (in Henzada) had been on the increase. Numbers of half destitute and desperate people had come over from Sarawah, the rest of the Sarawah people had gone into Tharrawaddy to enjoy the lawlessness of that place and Sarawah was almost deserted. Lieutenant Dangerfield tried to resettle it, and as there was no rice there he bought some and retailed it to the people. But Henzada continued to be filled with destitute people driven in from the Henzada and the Tharrawaddy sides by the loss of their property through the attacks of dacoits. As a result food was at a high price and crime was rampant. Rice was so scarce that it was sold at Rs. 8 per basket,* and even then only small quantities were available. Smith goes on to describe the "spectacle of a large tract of country in successful rebellion against the Government" and "the rebels in possession of the river." When the Deputy Commissioner himself convoyed some canoes down the river Gaung Gyi's men tried to cut off the last of them though without success. In June the articles collected for rebuilding Monyo were burned by the rebels. The Deputy Commissioner asked for Yegin to be established as a Military post, for a gunboat to patrol the river and for the re-establishment of Monyo. Meanwhile his request in April for regular troops had been met by the Governor-General with the suggestion that troops raised locally would be more able to deal with the matter as suffering less from the climate and being accustomed to the physical conditions. The outcome of this was the enrolment of the Pegu Light Infantry regiment of which, on account of its local interest, a short account is given in an appendix to this chapter; but it took some time to organise this. The Deputy Commissioner also asked in July 1853 for the Henzada side of the river to be made a separate district so that he could give his whole attention to the eastern side.

Meanwhile another rebel on the Henzada side Myat Tun, also a former *taikthugyi*, had been defeated just south of Danubyu by the combined movements of Sir John Cheape and Captain Fytche. After this, it is alleged, he

Continued
success
of Gaung
Gyi.

* The usual price was six to ten annas, or about one-sixteenth this.

went to Ava and although publicly repudiated there by King Mindon received secret instructions to join Gaung Gyi. Captain Lloyd, the Deputy Commissioner of Rangoon at the time, stated however that Myat Tun did not go to Upper Burma but lay hidden in the jungles of the Hlaing Division. But about the middle of 1853, he joined Gaung Gyi and took charge of the latter's operations on the river. On the 8th July Captain Phayre, the Commissioner, reporting to the Governor-General wrote : " Tharrawaddy has, I am informed, always been a disturbed district under the Burmese. It has never had a single soldier of ours within it yet, and must now be thoroughly subdued and the population disarmed. The Governor-General in reply issued a special caution against undertaking anything with inadequate means or under any conditions involving risk, because of the tendency in India and in England to distort or magnify trivial incidents in Pegu into serious disasters" ; he then gave the Commissioner a free hand. Almost at the same time H. M. S. " Nerbudda " patrolling the Irrawaddy succeeded in clearing the river of Gaung Gyi's friends. In connection with this the " Rangoon Chronicle " of the 27th July 1853 reported that the " Nerbudda " fired on fugitives including women and children. An enquiry showed that this was false; though one woman had indeed been shot by accident amongst the rebels. On the 25th July the Deputy Commissioner had reported the names of no less than ten active rebel leaders within Tharrawaddy but on the 31st he was able to report that the Sanywe neighbourhood was quietened and that other rebels along the river were disposed to surrender themselves. On the 29th August the Myoök of Tharrawaddy attacked Gaung Gyi with success and cleared the lower district of rebels. But on the 4th August U Talök, the Myoök of Myanaung, had been kidnapped by his brother-in-law Gaung Gyi and forcibly carried off to the latter's stronghold at Taungnyo. It was determined then to put a detachment of the Arakan Battalion at Yegin, which was preferred to Monyo for the purpose because the latter could only be reached by steamer in the height of the monsoon when the river was full. Quarters were made ready at Yegin for 150 men but eventually the force was stationed at Kanaung instead. On the 1st September Captain Phayre reported to the Governor-General " The whole of the division or township of Tharrawaddy which extends up the east bank of the Irrawaddy from a few miles above Sarawah to Tirroukmew (Tayokmaw?) of the map

is completely under the power of Gaung Gyi. Lately the latter has apparently determined to bring the people of the west bank to join him or to worry them for holding allegiance to the English." But on the 19th October it was learned that Gaung Gyi fearing attack had sent his family to the Pegu Yoma for safety. As a result of the success of the British in the south his influence seemed to be waning. Active measures against him were continued; and the British forces were strengthened by the arrival in January at Yegin of the first detachments of the Pegu Light Infantry. Early in January 1854 Gaung Gyi's quarters at Tapun were occupied by the British; he withdrew on their approach and waited in the jungle near by hoping they would tire out and go back. Being disappointed in this he retreated to the hills. In the same month of January a party of the Arakan Battalion and Sikhs under Lieutenant D'Oyly, who had become Captain Smith's Assistant, attacked him with success, capturing his gilt umbrella which was afterwards found to be a present from the Burmese heir apparent, his gong, twenty-five stand of arms, and the wives of many of his officers. Gaung Gyi's two elephants were nearly captured and one of his lieutenants was killed. Confidence in the British now began to revive amongst the people. The insurgents were followed up; no rest was taken lest news of the advance should reach them and they were completely surprised at "Baubein some 32 miles east of Tapun" (Bawbin) where many were killed or captured but Gaung Gyi escaped. The unhealthiness of the locality prevented further operations against Gaung Gyi in the neighbourhood of the hills. But the forces were unfortunately withdrawn to Prome whereupon Gaung Gyi at once neutralised this success by his renewed activity. He attacked all who had helped the British in any way, and established a reign of terror in the north of the district. He sent a party to kill the Myoök appointed by the British in Tapun and that officer escaped with his life but severely wounded. In January U Talök, the former Myoök of Monyo who was abducted by Gaung Gyi in the previous March, had been released and on returning to Monyo re-appointed in his former charge. On the 10th February another party sent by Gaung Gyi again abducted him*. Every village round Tapun up to within a mile thereof was burnt and the population driven off in spite of the presence of 350 men

* This repeated abduction of U Talök by his brother-in-law suggests that he was rather sitting on the fence; but no doubt of his loyalty is expressed in the contemporary records.

of the British forces in the town*. Thus the people again lost confidence in the British, and the terror of Gaung Gyi's name was higher than before. He collected much grain in Taungnyo circle. But the British forces as before, having lost the confidence of the people, were unable to get either information or supplies. Many of the people too preferred the anarchy to the system of British rule just being imposed in the neighbouring and more settled districts. Gaung Gyi at this time began the practice of attempting to assassinate Europeans in the British camp at night ; and men who came in to the British were caught and executed by him. Many of the leading men of the district who had submitted to the British were terrified into submitting again to Gaung Gyi ; one of these Maung Nyin Zwa on appearing before Gaung Gyi to make submission was put to death. All the interior of Tharrawaddy indeed had by the end of February lapsed to Gaung Gyi. The people feared visits of the British forces because of the punishment meted out to them by Gaung Gyi when the British left again. On the 3rd March it was found that Gaung Gyi had occupied the Ba-in forest which lay between Yegin and Tapun and had so cut the communications between those towns. It was clear that stronger and more active measures must be taken.

**Govern-
ment
takes
vigorous
action.**

There were then 300 men stationed at Tapun and 270 at Yegin, the Deputy Commissioner asked for 500 to be stationed at each of those places and 100 more at Monyo. He also asked for a European force with guns. It was further decided that temporary visits of British forces to villages should be avoided so that the villagers should not incur the anger of Gaung Gyi ; the British forces were to advance only where they could occupy permanently. In February the Commissioner had offered a reward of Rs. 2,000 for Gaung Gyi "alive and untortured" ; on the 3rd March the Governor-General while approving of the policy of offering a reward ordered its amount to be increased ten times, as no less sum seemed likely to be effectual. On the 7th March a company of the 10th regiment of Bengal Native Infantry was attacked about six miles from Tapun and saved only by the timely appearance of a force marching down from Paungdé. But about this time the energy of the British seemed to revive. On the 19th March the Commissioner was able to compliment the Pegu Light

* The officer commanding at Tapun was called upon for an explanation of this at the time ; but the explanation has not been traced.

Infantry (which had been in the field then for only about two months) for gallantry in the operations round Tapun. Yet General Sir John Cheape in command of the military forces of the Province and Major Nuthall in command of the Pegu Light Infantry both wrote at this time to the Commissioner expressing their anxiety about the disturbed state of Tharrawaddy. But on the 22nd Captain Phayre, the Commissioner, reached Tapun and in consultation with Major Nuthall and with Captain David Brown who was now the Assistant Commissioner arranged a plan to drive Gaung Gyi to the hills and to attack him in his strongholds in the Taungnyo circle. A post was established at Kunhnaywa to be held through the rains to check Gaung Gyi and another at Taungnyo. As a result no doubt of the revival of energy on the part of the British it was found that Burmese armed levies could be obtained to accompany the columns on a pay of four annas a day ; these were largely employed as scouts and to protect the flanks. The levies were officered by "Bo" or Captains on Rs. 40 per mensem each with a *Dutiya Bo* or Lieutenant on Rs. 20 per mensem ; they were armed with muskets and recruited chiefly from the neighbourhood of Paungdè. Major Pott was appointed to the command of the Tharrawaddy district, and Major Nuthall with the Pegu Light Infantry was placed at his disposal ; the force at Paungdè was to co-operate with the forces within the district. European forces were not supplied as they were not sufficiently mobile for the work in hand. On the 16th April 1854 the forces ready to deal with Gaung Gyi consisted of :—

1. A detachment of the Arakan Battalion at Taungnyo with two guns.
2. The Pegu Light Infantry at Tapun with boats to use during the rains.
3. A gunboat at the mouth of the creek leading from Tapun to the river.
4. The 4th Sikh Infantry at Paungdè.
5. One company of the 10th Regiment of Bengal Native Infantry at Yegin.
6. Another company of the same on the opposite side of the river at Kyanjin
7. Another company of the same at Teindaw.
8. One company of the 9th Madras Native Infantry at Monyo.

Burmese levies were stationed at Sanywe, Monyo and "Tharrawaddy." (It is not clear what is meant by the record by the term "at Tharrawaddy" in this place ;

**Collapse
of Gaung
Gyi's
power.**

probably it means Myodwin, but it may mean the whole southern part of Tharrawaddy which was under British control and required a force to keep Gaung Gyi out of it.) The monthly cost of these establishments amounted to Rs. 20,000. A Sarawah police corps was proposed on the 1st May to consist of 480 footmen with 60 officers and 6 buglers, and 120 horsemen with 12 officers and two buglers; the Governor-General sanctioned the footmen on the 18th May, but refused the horsemen. But in May it was reported that dacoits in small bodies were appearing all over the district, and the Deputy Commissioner of Sarawah and the Assistant Commissioner who might be in charge in his absence were empowered to carry into execution at once sentences of death passed on any persons convicted of participation in open and armed insurrection. These powers were withdrawn as unnecessary only in February 1856 and in 1858 had to be granted again to the Deputy Commissioner, Tharrawaddy, for a time in "cases in which there had been loss of life." In July the Sarawah district was divided into the Henzada and the Tharrawaddy districts in order that the authorities in Tharrawaddy might be able to give more undivided attention to Gaung Gyi. Captain David Brown was appointed Deputy Commissioner with headquarters at Yegin and in concert with Captain D'Oyly at Paungdè set to work to restore order. In November on a motion to withdraw the native troops it had to be reported that the police corps and the Pegu Light Infantry were not sufficient to protect the country from Gaung Gyi. But the Pegu Light Infantry continued to render valuable service and enabled Captains Brown and D'Oyly to press the attack on Gaung Gyi. In February 1855 the Arakan Battalion after being specially complimented for its work in quieting Tharrawaddy district was withdrawn and replaced by detachments of the Pegu Light Infantry. By this time Gaung Gyi's power had collapsed owing to the close pursuit he suffered and the problem of pacification had resolved itself into that of dealing with a number of small dacoit parties of which his was one, small outrages took place; on the 23rd April 1855 Captain Madigan who was employed in laying the electric telegraph was murdered at Ngapyawdaw about three miles north of Monyo whither he had ventured without an escort. But steady progress was made and in June 1855 Captain Brown though disappointed at not capturing Gaung Gyi, had the satisfaction of learning that he had withdrawn across the frontier to Burma. In 1857 there were many attacks made

upon the northern boundary of British Burma as the result of a frontier agitation promoted by persons in authority in the Burmese dominions preparatory to more serious operations which began to be contemplated when news of the Indian Mutiny was received in the Province. In 1858 the attacks were systematically continued by large bands of men who were suffering from the scarcity of rice prevailing in the Burmese territory. On urgent remonstrance to the Burmese court effectual preventive measures were adopted by the Burmese frontier authorities. At this time Gaung Gyi came to the frontier from up-country intending to make an inroad at the head of a considerable force. By special orders from the capital he was ordered to desist, and as he refused to obey he was shot by the local Burmese authorities.* Sir Herbert Thirkell-White in his "A Civil Servant in Burma" relates that he met in Mandalay some of Gaung Gyi's descendants, and a grandson of Gaung Gale came into prominence in Tharrawaddy in 1888.

After the withdrawal of Gaung Gyi across the frontier the district soon settled down so that in 1857 Tharrawaddy suffered only three dacoities as compared with 58 in Henzada, and the Administration Report of that year declared that "Tharrawaddy is probably the best ordered district in the Province." In 1859 and 1860 Tharrawaddy again had "less crime in proportion than any other district" and so things continued until about 1865. In that year there was an increase in violent crimes, committed chiefly by organised gangs from Paungdè, but these were gradually disposed of, and in 1873 there was only one case of dacoity in the whole district of Henzada in which Tharrawaddy was then included Tharrawaddy was entirely free and it was remarked that "In Tharrawaddy once the most turbulent district in Burma a gang would find no sympathy amongst the people and would soon be disposed of by them." In the meantime too the dacoities had changed in character. Originally they were attempts by petty officials to resist the new dominion, and their prestige was due to this character. By 1872 they were no longer even bushrangers with organised followings and more or less romantic associations; they were mere ordinary casual criminals temporarily associated together for a particular enterprise.

Pacifica-
tion of
the Dis-
trict.

* Report on the Administration of the Province of Pegu for 1858-59, by Lieutenant-Colonel A. P. Phayre.

**The
Myingun
Mintha.**

In 1868 the district had a narrow escape from disorder when the Myingun *Mintha* who escaped in February from the Rangoon Jail in which he had been imprisoned after heading the Upper Burma rebellion of 1866, started for Tharrawaddy in connection with the organisation of a rising which he was planning. On the 22nd August he was met by Maung Kyi, the *Myoök* of Hmawbi, who eventually arranged his capture, and persuaded him to go back to Rangoon.

Part III.—The Final Pacification.

**Disorders
after the
Annexa-
tion of
Upper
Burma.**

In 1878 after the opening of the railway there was an increase of serious crime and dacoity both in the new Tharrawaddy district and throughout the province. An escaped convict from the Toungoo jail named Paw Din raised a gang in Tharrawaddy and committed six dacoities before the gang was scattered, after which he retired to Shwegenyin district to cause disturbances there. Some other gangs began operations too, but they were soon disposed of; and in 1880-81 the district showed a comparatively clear crime calendar. But in 1885 the district began to get out of hand; the police as a rule did not behave well, they gave little or no assistance to the authorities, and in the early part of 1886 a storm of disorder which burst in the Shwegenyin District in December 1885 spread to other districts and Tharrawaddy became the scene of quasi-rebellions which were suppressed only with the aid of troops. Nga Aung who lived within five miles of Tharrawaddy headquarters raised a golden umbrella and in a week he had collected many guns from surrounding villages and had a following of several hundred men. Other risings of a political character were headed by Landa and the *Pöngyi Bo*. When these were suppressed the rebels broke up into small bands which infested the district throughout the year. To prevent firearms falling into the hands of dacoits, villages with less than five guns were disarmed, but the dense jungle of the district made capture of the dacoits difficult. Informers were often murdered, and villagers were too frightened to give information; the headmen were useless. Even the township officers were bad, most dacoities took place close to township headquarters and police-stations. The police seemed to be frightened, they paid only flying visits to the scenes of crimes, and were almost useless for detection. Bad characters of all kinds banded together and took to the jungle, while less daring spirits

stayed in their villages and dacoited under cover of the notorious gangs. In the third quarter of 1886 there were no less than 159 dacoities reported, and the police could not have been altogether useless for they secured 76 convictions; in the next quarter when 139 dacoities were reported they arrested 139 dacoits. But for the most part in this and in the two succeeding years dacoities were the work of gangs of outlaws in formidable numbers under recognised leaders, and the work of the police was of the nature of petty warfare. The police force was strengthened and police-stations increased, Indian police brought from Northern India, punitive police imposed. Karen levies were organised by enrolling volunteers as special constables on the understanding that they would turn out to assist the regular police when called upon to do so. In Tharrawaddy however few Karens were enrolled, there the so-called Karen levies were Burmans. When on active service these received pay and were armed by Government, those who lived in villages in which not less than ten, or in some cases five, guns were possessed were allowed to retain their guns whether on active service or not. The dacoits were continually hunted and the storm began to pass over; in the early months of 1887 much progress had been made in settling the district. But about the middle of the hot weather the local officers adopted the disastrous policy of issuing licenses for firearms freely. This was followed by a recrudescence of dacoity which rendered necessary the adoption of special measures for the restoration of order. Special magistrates were appointed, special powers were granted to the Deputy Commissioner, and fines were imposed on villages under the Rural Police Act. Punitive police were not imposed after August 1887, but just before that there were no fewer than 375 who had been employed in the district at the request of the people; a strong body of regular troops however was stationed at Tharrawaddy, detachments of 25 or 30 each at Tapun, Monyo and Zigôn to protect the treasuries, and similar detachments at five other stations. These were not employed in dacoit hunting but they freed the hands of the police. In April 1888 Mr. Todd Naylor became Deputy Commissioner, and the work of pacification was vigorously pressed on. Disarmament was completed, and the people were made to understand that they would be held responsible and would be punished for failure to assist the authorities in preserving order. But soon after came the most serious disorder of all, a rebellion under a *póngyi* named U Thuriya who lived in the monastery at Myingaing near

Gyokingauk. There had been a severe epidemic of cholera and agricultural operations seemed likely to be stopped owing to a failure of the early rains. The disorder of earlier years had led villagers to purchase guns for their defence often at absurdly high prices, the danger of these falling into the hands of dacoits had compelled Government to disarm the district and 976 guns were confiscated. The punitive police imposed in 1887 at the request of the people had cost in that year Rs. 76,533, an average cost of Rs. 1-5-6 per house, and were to cost about the same rate per house in 1888, the people began to fear perhaps that this would be a permanent tax. Fines had been imposed under the Rural Police Act, and cultivators forbidden to live in isolated houses. The "Karen levies" and the punitive police were said to force labour and take food without payment. There was fear of the imposition of an income-tax in the towns. None of the persons engaged in the rebellion and arrested afterwards however were found to have suffered from this additional taxation, and the rebellion seems to have been due to political causes and the general Burmese belief in an eventual restoration of Burmese sovereignty. But the principals were no doubt enabled to obtain followers more easily when the people's minds had become unsettled by their calamities. The dismal prospect of a failure of the rains was emphasised by the failure of the crops in the previous year. Except in the Thônzè circle the rice crop of 1887-88 had been far below the average and even so high prices had led the people to oversell. A low rise of the river had spoiled the fisheries. The degree of poverty prevailing is indicated by the numerous transfers of children to persons ready to adopt them which took place even in Thônzè near the parts where the harvest had been good; premia of Rs. 5 to Rs. 30 were paid to the parents on these occasions.*

The rebellion was well organised, U Thuriya's arrangements extended all along the railway line from Paungdè to Tharrawaddy. His adherents were bound by an oath and many of them were tattooed with the letters ၁၃၂၀ partly as a distinctive mark, partly to make them invulnerable. Some 1,700 palm-leaf tickets were pre-

* This must not be confused with any system of selling children; adoption is common amongst Burmans. The stress is shown by the readiness of so many parents to surrender their children within a short period. Letter No. 1-3 V.C.R., dated the 26th August 1888, from Superintendent of Police, Tharrawaddy, to his Inspector-General, has details of some cases investigated and substantiated.

pared for distribution to the rank and file, commissions in larger pieces were given to the leaders, and a grandson of Gaung Gale, the brother and assistant of the famous Gaung Gyi, was nominated Viceroy of Tharrawaddy under the Myingun Prince. The various dacoit gangs of the district nearly all joined in the scheme.. The 2nd July was chosen by an astrologer as a suitable date and it was arranged to make on that night a simultaneous attack on Gyobingauk, Zigôn, Nattalin, Paungdè and the stations between Okpo and Tharrawaddy. For some reason the *póngyi* got impatient and action was taken on the 1st—2nd July at mid-night when they cut the telegraph wires and forced the railway workmen to pull up a rail on the line between Gyobingauk and Zigôn. The *kyedangyi* of the neighbouring village of Kayingôn was dragged out and informed that the rule of the foreigner was at an end. A proclamation was read to him which, he was told, was issued by the order of the Myingun Prince. This proclamation, of which copies were afterwards obtained, included no reference to oppression or misgovernment; it was purely political. Having pulled up the rail the rebels marched south to capture or sack Gyobingauk and the Prome mail train.

Meanwhile the *kyedangyi* of Wunbè-in village near Zigôn, named Tha Pe, had at 10 a.m on the 1st warned Mr. Hill,* the Police Officer at Zigôn, of the projected rebellion. Mr. Hill took measures to save the guns of headmen and others in the neighbourhood and of the Bawbin police outpost from falling into the hands of the rebels and informed the Deputy Commissioner (Mr. Todd-Naylor) and the Inspector-General of Police. The Deputy Commissioner proceeded to the scene in a light train which acted as pilot to the night mail and saved it from wreck, and after an exciting night and diligent search quashed the rebellion and arrested 84 of those concerned. There had been a rumour that Sir Charles Crosthwaite, the Chief Commissioner, would travel by that train, and it is possible the date of the rebellion was altered on that account. It was believed that the party which tore up the rails at Zigôn intended to tear up another rail behind the train so that they might capture it.

The suppression of the rebellion served to show that Government could and would insist upon the maintenance

Suppres-
sion of
the Re-
bellion.

Peaceful
state of
the dis-
trict.

* Mr. H. S. Hill was in 1914-15 the District Superintendent of Police at Tharrawaddy. Maung Tha Pe was rewarded with a grant of 33 acres revenue free in perpetuity.

of law and order. The police improved so that by the end of the year detection of crime in this district was described as excellent. A year after the rebellion the Chief Commissioner was able to say that the dacoit gangs had been extirpated and the district brought to a state of quiet which it had not enjoyed for a long time.

Archaeology.

There is nothing of archaeological interest in the district. The oldest pagodas appear to be three known as Nandaw U, Shwemyindin, and Shwemyinmi built by King Tharrawaddy at his home at Myodwin about 1830, and one called Lawkazeya at Mingyi, which is near the river bank north of Monyo, also built by King Tharrawaddy in 1843. He built it on the site of a large house which he had formerly occupied when living in retirement and at which he had put up both when going and when returning on the pilgrimage which he made to the Shwe Dagon in 1841. In 1873 Mindon Min obtained from the British Government permission to repair this pagoda in honour of his father. It was stated then that the pagoda was in tolerable repair—"that is standing and not in a tumble-down condition"—but no objection was raised to the King's project.

This lack of antiquities is hardly surprising. The greater part of the district appears to have been a swamp until quite modern times. This would account for the small part it has played in the history of the country. Moreover the only materials readily available for buildings were timber and bamboos; so that it could hardly be expected that antiquarian objects should exist. The Burmans too when they conquered the Talaings generally destroyed all the Talaing monuments they found. It is not known if any Talaing monuments ever existed in Tharrawaddy: but if they did they would not be likely to be extant now.

The circumvallation at Myodwin is merely a rampart built by Prince Tharrawaddy during his retirement to that place in 1831 to 1837; it was notified in 1911 under the Ancient Monuments Preservation Act of 1904.

CHAPTER III.

THE PEOPLE.

Population.

The average density of the population at the time of the census of 1911 was 151 to the square mile arising from a population of 433,320, almost equally divided between males and females, the latter being some 436 in excess. The rural population however is divided differently between

the sexes, females being one *per cent.* in excess. In the towns 12,752 males were counted against 10,834 females; this difference is undoubtedly due to the number of Indian immigrants in the towns along the railway line. The population at previous enumerations of the area at present included in the district * is shown in the following table:—

Census Year.	Males.	Females.	Total.	Density <i>per</i> square mile.
1872	85,714	85,488	171,002	60
1881	140,295	131,706	272,001	95
1891	171,295	167,945	339,240	119
1901	201,033	194,537	395,570	139
1911	216,442	216,878	433,320	151

The rate of the increase in the decade 1901—1911 was 9½ *per cent.* which is less than that of 12 *per cent.* usually reckoned in this province. The excess of males appearing from 1881 to 1901 (due probably to railway construction) cannot account for this, because much the same result is obtained from observation of the increase in the Buddhist population in which females outnumber males. The true reason is probably shown by the returns for emigration and immigration. In the census returns persons born in the district and enumerated elsewhere in the province are called emigrants, persons enumerated in the district who were born elsewhere are called immigrants; emigration to countries beyond Burma is negligibly small. With these conditions the census tables give the figures shown in the margin.

	1901.	1911.	
Emigrants ...	28,860	27,821	The important factor is a diminution of 17,540 in the number of immigrants from other parts of Burma. These come chiefly from the districts of Prome, Magwe and Thayetmyo; but the decrease is not only in relation to these districts but universally. It is too large to be accounted for by the deaths of the original
Immigrants from other parts of Burma.	61,656	44,116	
Immigrants from India.	9,712	8,882	
Immigrants from elsewhere.	1,190	1,639	
Total Immigrants.	72,558	54,627	

* There have been small variations in area arising from river erosion and accretion. Political changes have been allowed for in the table.

immigrants and is probably due to the exhaustion of the supply of culturable waste land. Practically all the land available in 1911 was either barren soil near the hills on the east or low land on the west in which the chance of raising a crop after the floods subside is so small that permanent cultivation is impossible under present conditions. At the same time there have been opened up districts to the east of the delta area which offer to the immigrant attractions as great as those formerly offered by Tharrawaddy; e.g., the Settlement Officer in Pegu in 1913 found large numbers of Tharrawaddy people cultivating at Bawni. Naturally, not only do no more migrants come to Tharrawaddy, but those who came before and, finding only inferior land unoccupied, failed to become firmly settled, have now moved on again to the more promising area. By this time the process of re-emigration has probably been completed; a normal rate of increase may therefore be looked for in future.

Distribution.

The distribution of the population by townships is shown in Table II of Volume B of this gazetteer, and by language and race in Part I of that volume. An interesting feature is the distribution amongst villages and towns of various sizes. There are in all 645 towns and villages, and the population is distributed as shown in the following table:—

Population per village.	Under 500.	500 to 1,000.	1,000 to 2,000.	2,000 to 5,000.	5,000 to 10,000.
No. of villages	293	271	69	8	4
Population (000 omitted.)	92	190	99	22	29

This table shows that the people tend to collect in villages with a population of about 700, while the next most attractive village is that of about 1,000 to 2,000 inhabitants. In Burma generally the number of villages with a population of less than 500 is proportionately much larger. But in Tharrawaddy it must be remembered that a village often consists of several discrete hamlets. The four large towns are Thonzè, Letpadan, Gyobingauk and Zigón, which will be described in Chapter XI; the civil station of Tharrawaddy had in 1911 a population of only 3,246.

Character of the people.

A note on the criminality of the district is included in Chapter IX; in other respects no special description need

be given of the Burmans of the Tbarrawaddy district. As elsewhere in the Delta their villages are built on the small patches of higher land found here and there in the midst of the general plain or on the banks of the rivers where the deposits from successive inundations have formed a low narrow ridge. The difficulty in keeping down crime has led the officials to order the maintenance of village fences. These are generally constructed of palings of split bamboos with spikes pointing outwards worked into them, and besides their proper office of keeping out bad characters have in many cases prevented the villages extending beyond them in the straggling manner usual in deltaic areas even when natural conditions would have permitted this. The village monastery is generally in a separate enclosure outside the village, connected with it by a raised path. The houses are raised above the ground; and the pigs, the poultry and the pariah dogs, the playing children and the cattle are jumbled together below just as in Burmese villages elsewhere. As in other districts rural sanitation is unknown and its lack sometimes becomes conspicuous. But the effect of this upon the people is diminished by their open air life so that the villages, judged by statistics, are not unhealthy—the death rate lies generally between 24 and 26 *per mille per annum* which is about the same as that for the Province generally. Much more disease arises from malaria aided by exposure to rain and sun and the lack of protection by clothing against the varying temperatures than from the influences generally regarded as arising from lack of sanitation. Often the difficulty of sanitation lies in lack of space. Everywhere cultivation has been carried up to the village fence which cannot therefore be extended to provide room for the constant increase in the population so that houses tend to become crowded together. New groups of dwellings constantly spring up and the administration has shown itself ready to recognise these as villages or hamlets if only they are large enough to defend themselves against bad characters. In rural villages the houses have posts of bamboo, sometimes of wood, with walls of bamboo mat and roofs of *thetkè*. A few plank houses, generally of two storeys, are found in richer villages and these often have the roofs of corrugated iron. The furniture is generally of Burmese character; the European tables and chairs, the clocks and gramophones, and other imported articles found in so many houses in Hanthawaddy are rare in Tharrawaddy. In the towns plank houses are common and in the central blocks brick buildings are to be found; while the furniture

is more pretentious. Monasteries are often of brick in and near towns, but generally are of wood with perhaps an iron roof and brick steps. Cultivators as elsewhere in the delta build huts out in the fields for the cultivating season if their houses are far distant. But the number of such huts is less than in some districts because the mutual proximity of the village groups generally allows the cultivator to choose a convenient hamlet in which to live. The bamboo, wood and *thetkè* required for constructing or repairing the houses are generally obtained by the house-owner's own labour of collecting them in the forest, and he generally builds the house himself too getting labourers to assist if the house is large. In some cases in the villages, and perhaps more commonly in the towns, the materials mentioned are purchased. Corrugated iron is sold in all the bazaars but it is sometimes so thin as to be almost useless.

Clothing.

The usual Burman clothes are worn. A silken "paso" costing 14 or 15 rupees is generally owned by the ordinary villager; it is kept for high days and holidays and has to last three or four years. His wife has a silken *lóngyi* of inferior quality, probably with much cotton in it; but as she pays about half as much for it she is able to renew it every two years. Most of the cotton clothes are bought, though the amount of home weaving increases as one travels away from the railway stations, and most houses more than three or four miles from the line have a loom. Even then it is only the *lóngyi* (skirt) that is woven and imported yarns are used. The coat or shirt is nearly always made in the bazaar from imported cloth. Shoes of the Burmese type are generally purchased—one pair *per annum* at a cost of Rs. 1-8 to Rs. 2—by the farmer, and if he is not too badly off his wifes gets some too. About Rs. 20 each *per annum* is a common moderate rate of expenditure on clothes by a petty landowner and his wife. Gold and silver ornaments are the usual investment for savings. Cotton blankets and pillows stuffed with raw cotton—often the silky cotton of the Letpanbin (*Bombax malabaricum*) are generally used for sleeping; mosquito curtains are used by most people and are made as a rule of Swiss muslin.

Food.

Food as in all Lower Burma consists chiefly of boiled rice eaten with fresh or dried fish or vegetables; or sometimes with beef, but this is expensive. Sessamum oil, onions and chillies and turmeric are used in cooking; the last is used to cure excessive "fishiness." The rice most commonly grown is of the *letywesin* variety, but that is chiefly for export; if the cultivator has any land in his

holding capable of growing *kaukkyi*, even if it is not really suitable for it, he will grow enough *kaukkyi* for his own needs. Fish caught in the Myitmaka and other rivers is sold in the bazaars and hawked freely in the villages ; in most villages it can be purchased, except perhaps during the rains, at least every other day. During the rains fish can be caught in the fields and streams if time can be spared from cultivation, and children are often occupied in this way. The borrow pits of the roadside afford many a dinner of fish too. Beef is hawked in most villages within six or eight miles of the railway, while people within one or two miles of the larger towns go in periodically to purchase it in the bazaar ; villagers living near these towns often purchase beef once a week. Pork is a great delicacy but its price is high so that it can only be bought on few occasions. Vegetables bought—rarely home-grown—leaves or flowers or seeds gathered in the fields, dried fish imported through Rangoon, *ngapi*, prawns fresh or dry, fill in most of the days on which these expensive articles cannot be bought. *Kazunywet*, a low creeping plant found in all shallow ponds and often in the fields too, is perhaps the leaf in most common use. The home-fed chicken must not be forgotten as an occasional treat ; nor must the frogs the search for which, generally by children, is the explanation of the weird lights seen moving about both in town and in country near the villages at ten to twelve o'clock at night. Up in the foothills many of the people are however very poor ; as they cannot afford to eat rice they live chiefly on maize, plantains and wild jungle products.

From the towns hawkers of cakes and biscuits go out into the villages to do a thriving trade. The children of a Burmese family regard it as a matter of right that they should get from a pice to an anna each to spend on cakes every time the cakeman comes round, and the parents always give the money if it can be obtained even at considerable sacrifices in other directions. Even the poorest will borrow a copper or two for this purpose from neighbours less poor, paying back in paddy or in cash with interest at harvest time. As the "cakes" are often composed of nutritious brown wheaten flour, pea flour or jaggery fried in oil which is itself a valuable food, the extravagance in this expenditure is more apparent than real. It is somewhat remarkable how rarely the Burman thinks of cooking these things for himself. As products of domestic cookery they are almost unknown ; the Burmese woman who cooks to sell in the bazaar confines herself

Tharrawaddy District.

as a rule to puffy rice flour pancake, or to an annulus of jaggery fried in oil. She sometimes makes "kyet-thunga-baung-gyaw" which is an intimation of the "nga-baung-gyaw" of the lower Delta made by frying a tangle of pieces of onion instead of the small fishes.

Condensed milk and European biscuits, jams, tinned fruits and meat are sold in all the large towns, but these are purchased almost solely by townsfolk; country folk have little to do with these exotics nowadays, the fashion of eating these which prevailed a few years ago has gone with the loss of the charm of novelty. "Kyantaga, a cake of boiled sugar cane juice prepared by the Shans and others who grow the cane, is a sweetmeat the consumption of which is by no means confined to women and children. A viss or so is often bought and kept in a glass stoppered jar to be produced with the betel and tobacco for the entertainment of a guest later on when it is out of season.

In the dry weather melons, tomatoes, cucumbers and a few other fruits are grown in the silt left by the floods of the rivers on the west and these are sold cheaply in the villages by hawkers and in the bazaars of the towns. Such vegetables as pumpkins and beans are not generally grown by Burmans, but by Shans here and there from whom Burmans buy. During the dry weather Monyo township supplies the railway towns with these but during the rains they have to be imported. Apart from mangoes, which are not cultivated with care, and rather poor plantains, there is very little fruit to be had. Wild pineapples are sometimes obtainable, now and then a jackfruit (generally wrongly despised by Europeans who throw away the seeds in ignorance of their excellence as substitutes for chestnuts when cooked, or a few custard apples grown near Kunhnaywa; but there is generally a dearth of fruit, and supplies for the towns are imported by railway from Rangoon or Prome, and while the villagers go without.

Fuel. Fuel is obtained by villagers by cutting in the forests both in the east and in the west of the district, and in some parts still by cutting trees in the rice-fields. In the towns it is generally rather expensive and is bought before the rains begin from men living near the fuel reserves established by Government who hawk logs in the town at Rs. 3 to Rs. 6 a cart-load according to the season. The unfortunate householder who has to buy during the rains may find the price still higher. When the Irrawaddy Valley State Railway was first constructed considerable areas of forest were reserved to provide fuel for its engines

which required some 10,000 tons of wood every year. In 1881-82 a Ransome's steam tree-feller was used to prepare the railway fuel, but about this time coal had come into general use on the line. Some parts of the fuel reserves were then opened for cultivation ; but some were retained to supply fuel for the domestic purposes of the villagers and for the towns.

No records are available to show the course of local ^{Cost of} living. prices, but in general terms it is true that formerly food, building materials and other household necessaries used to be plentiful and cheap or even free but now, owing to the spread of population, have generally to be bought in the greater part of the district. Rice was formerly grown almost entirely for home consumption, and although it was frequently not available then on account of the destruction of crops in times of disorder, it now has to be bought at a price which occasionally rises fairly high. Firewood and thatch could formerly be obtained by everybody close at hand ; now some cannot get them without buying, others have long journeys to make for them. But it must not be assumed at once that living is relatively dearer or that the conditions of life for the labourer are harder. The monthly wage of a labourer in 1852 was Rs. 8 and was still the same in 1871 ; the wage now is Rs. 12 with a distinct tendency to rise. A mere comparison of prices even of necessities gives one little indication of essential matters in comparing the costs of living at different epochs, when the conditions of trade and industry have changed as they have in Burma during the last century. Even when we have learned the actual wages received by the labourer taking account of periods of lack of employment, and the scale of living he was enabled to support by those wages, we do not know the extent of the hardships to which he had to submit to obtain them. Some impressions relevant to this matter are however received in perusing the early records of the British occupation. The district was liable to the same capricious exactions by local officials as other parts of Burma ; if there were fewer superior officials as a result of the direct connection between the local *myowun* and the Crown, there was also the disadvantage that the *myowun* so far from the capital was quite uncontrolled. The division of authority between the *myowun* and the *sitke* increased the occasions when bribes would be necessary. Periods of internal disorder seem to have been frequent ; and probably these always caused as much hardship as did the period of which we have a record, the

period of the first half year of British administration. Later the district suffered from the operations of Gaung Gyi in a manner unusually severe ; but before Gaung Gyi became active there was probably nothing very unusual in the degree of disorder prevailing. At that time Captain Smith reported that "nearly all the gang robberies of this district originate in the scarcity of food; the people are forced by absolute want to band together for the purpose of plundering villages and boats known to contain rice, *ngapi* and other necessities of life." The lack of shrines and other religious buildings founded before the British occupation in the parts then inhabited also implies a lack of superfluous wealth ; or a liability for evidence of wealth to be the cause of extortions by the officials—which comes to much the same thing in the end. At the present time the cultivating classes seem to be distinctly poorer than similarly situated people further south ; the labourers have difficulties in making ends meet and only succeed sometimes by adopting temporarily a low standard of living, eating wild roots and leaves of little food value for condiments with their rice. But there is no grinding poverty, no class existing continually on the verge of starvation. Occasional hard times are not more than can be borne with the ordinary assistance given by all Burmans to less wealthy neighbours, consisting generally in giving food in return for which the recipient makes himself generally useful about the donor's house or land—even though the labour may consist only in preparing fuel for cooking that food. One still meets sometimes in the villages with a happy-go-lucky sort of man who with few wants succeeds in maintaining himself and perhaps a family (with the aid of his wife's earnings in the planting season) without submitting to the yoke of regular employment—a regular Thorold in his way—but earning a little now and then by such light tasks as preparing a little herbal medicine or a love-charm. But he is the exception that proves the rule that under present conditions life is more strenuous than before. Every opportunity to earn must be seized ; while father must find employment in the ploughing season and follow it up by herding cattle until he can get work in harvesting, and then must turn to carting or boating or the collection of fuel, mother must go out to transplant paddy whenever employment can be had and the children must help as soon as may be by catching fish for their dinner or a little later on by herding or other field work. Whether after all life is easier than before or not is thus debatable. The

people say they prefer present conditions; in spite of their many disadvantages they have brought security. But as they do not know the earlier conditions with which they are asked to compare, and moreover would consider it hopelessly tactless and rude to tell anyone connected with official life that they preferred the old regime, one must accept the statement with reserve. Certain it is that a Westerner would much prefer present conditions to the former, and probably most Burmans would still do so too if they understood both terms of the comparison. It goes without saying that those who have any considerable wealth all prefer the present conditions.

Marriage customs call for no particular remark in Tharrawaddy. That most people marry and that most marriages take place after the age of 20 is shown by the results of the 1911 census in which 197,292 persons were recorded as married in a total population of 433,320; while of the married persons 1,843 males and 6,318 females were between the ages of 15 and 20, 278 females between 10 and 15 and one girl was under 10. These young married persons were probably all amongst the Indian immigrants; Burmese and Karen girls do not marry under 15.

The numbers speaking each language in 1911 are shown in the B Volume of this Gazetteer; except in the hills age. Burmese is understood by everybody when he desires to understand it.

Normally the people have the usual love of dramatic performances, the *zat* and the *yokthe* and the *anyein* or variety concert and rarely the *yein* or organised posture dance all finding favour. Occasionally a circus or a party of acrobats, conjurers and miscellaneous entertainers visits towns on the railway, and such a venture never fails to be supported by the Burman. But the imposition of punitive police in 1912 was accompanied by an order forbidding *pwès* for five years, partly on account of the tendency for crimes to be committed as the result of these gatherings, partly as a punishment by deprivation of the favourite amusement. A feast at a *shinbyu* or at a wedding or funeral and an occasional visit by the travelling gramophone are all that are permitted just at present. There are no local festivals of provincial repute as there are no ancient pagodas.

Gambling is common in the railway towns which are, not without reason, looked upon by respectable country folk as dangerous centres of iniquitous attraction for their

growing boys. At Zigôn and Letpadan are billiard tables whose contours demand careful study by one who would play with success. Drink and opium, and of recent years cocaine, have their devotees; while still older men find comfort in religion.

“There’s naught so much the spirit calms
As rum and true religion.”

The village children play marbles and *chinlón* and the other games usually played by Burmese children. Amongst older children football has become popular; a district tournament in which the trophy is a cup presented by Major Nethersole has generally five or six entries. A second trophy presented by “Bindrabünd,” a P.W.D. contractor, is also competed for during the season. The district generally sends a team selected from players in the local tournament to compete in the inter-district competition in Rangoon and in 1914 won the cup presented in that connection.

Recreation grounds have been provided by Government for the towns of Thônè, Tharrawaddy, Letpadan, Sitkwin, Minbla, Othegôn, Okpo, Gyobingauk, Zigôn and Nattalin.

Religion. Buddhism is the prevailing professed religion,* but as everywhere in Burma Animism is the true religious faith. In 1901 Mr. Lowis in his Census Report described the Buddhism of the Burman as a superficial polish—a polish of value, but still a polish. “In the hour of great heart searchings . . . the Burman falls back on his primeval beliefs.” This is true both of the Burman and of the Karen in Tharrawaddy, premising however that the heart-searching need not be very deep. Many of the ordinary practices of spirit worship have as little real meaning now as the Jack in the Green has in England; but others indicate a real belief in the influence of spirits. It is noticeable that the *natsint* is often to be found placed between the village and its monastery, so that a visitor to the latter can always be sure of following the true religion by offering at the *natsin* too.

The *póngyi*s disown the practice, but they are discreet enough not to see the *natsin* on their journeys to and from the village. The fact that to make a sacrifice at a *natsin* one need not do more than exhibit the article there

* The 1911 Census figures were Buddhist 413,584; Hindu 7,406; Christian 6,052; Mahomedan 3,857; Animist 2,376.

† A small wooden tent open in front raised three or four feet from the ground placed outside the village for the *nats* or spirits to live in.

and can then take it away for home consumption probably tends to a continuance of the observances. Karens are particularly ready to sacrifice sucking pigs and beer made from jaggery in this way. The ease of combining Buddhism and Animism is shown with particular clearness when sickness visits the house. Flowers and candles are offered at the Buddhist shrine, miniature clay pagodas are erected upon a tray set up in front of the house : but the *nat* in the *natsin* is carefully propitiated with the particular dish which appeals most to the sacrificer, and it is upon this sacrifice that reliance is chiefly placed for a cure. It must not however be supposed that the ordinary villager is in any degree conscious of his animism ; the only reason given for many of these observances is that it is customary to do so. Their Buddhism is generally of the same quality, and it is not strictly correct to say, as Mr. Lewis did in the passage quoted, that the Burman's Buddhism is a philosophic veneer. The philosophic side of Buddhism is little known to the Burman of Tharrawaddy. Buddhist religion to him means the observation of certain practices such as reverences for *pōngyis*, offerings at pagodas, due celebration of the *shinbyu* and of funeral rites, and in older people a love of assembling in the *sayat* on duty days for gossip. It is to be remarked that the tendency of the younger generation to neglect Buddhist observances is accompanied by an equal or greater contempt for and neglect of the Animistic observances of their parents—though the advanced young English speaking camp-clerk will generally find reasons for not pitching his superior's tent near a *ficus* tree, however pleasant its shade.

The Christians in 1911 numbered 6,052 of whom 783 were Roman Catholics and 5,145 were Baptists. Most were Karens ; but it must not be supposed that all the Karens were Christians, there were altogether 23,360 Karens in the district, generally Buddhists in the plains and Animists in the hills.

There are almost no traditions that shed any light on the early movements of the Karens in this district apart from those which are more or less general about the whole Karen race, such as their coming down across the "River of Running Sand" and reaching the stream of a large river where they found shell fish and roselle and where they waited a long time boiling the two together and were puzzled over the continued hardness of the shell-fish and the red blood (as they supposed) which exuded from them.

Then when they got to the south land they settled in a place where the land was "good," that is, where if a hole was dug, the earth dug out would just exactly fill the whole up even full again.

The earliest settlements of Karens in the Tharrawaddy District which can be definitely located were those still existing. At the south were a few villages near the present Ngapugale Railway Station, and also to the west of that and between the Irrawaddy river and the Hlaing. Then again near Inywa, and Wethlagale stations. Then further north in the Gyobingauk Township about six miles west of the present station. Further north there is another large settlement near the Irrawaddy river just on the northern border of the District and over into the Prome District west of Paungdè. There are and have been for generations, Karen villages in the Yomas along the headwaters of the various streams the whole length of the district.

The Karen villages in the plains would hardly be distinguished from the Burman villages around them. Their style of houses and manner of living does not differ materially from that of their neighbours. In religion until recently they have held quite firmly to their own animistic rites, *nat* feasts and family customs. During the last two or three decades those who have not become Christians have drifted into Buddhism, but at the same time holding their own animistic beliefs and superstitions.

But in the hills the primitive Karen customs still exist almost untouched by the outside world. There are a number of the one-structure villages where the whole village is a single long bamboo structure without a board or nail in it. Each family occupies a section of "room" entered by a door from the central passage way. The whole is raised above the ground and enclosed in a stockade to afford protection from wild animals and dacoits. As many as twenty or thirty families will thus live in close contact with each other, and they show very clearly their peaceable character in doing this without continuous quarrelling. Here is also to be seen the distinctive Karen dress. The men wear the single "*say-plo*," a bag-like garment slit for the neck and armholes. The women wear a dark coloured jacket, the better ones being trimmed with the seed embroidery, and the skirt, each village or section having a different pattern. They grow their own cotton and do all the work of spinning, dyeing and weaving. An elaborate head dress is also worn by the women. The village site is changed every year. When the bamboos of

the house become rotten and eaten by insects, instead of repairing it they choose a new site near some stream and build anew there. Thus their village moves about as they shift their *taungya* cultivations. These people in the hills are still very shy and cautious. They much dislike to mingle with outsiders especially the Burmans from whom they suffered in the early days. Both in the hills and in the plains it may be said that their stolid stupidity is more apparent than real, and is due to distrust. As to their morality many observers have testified that a more moral people could hardly be found than they were up to the time that the rule of the elders began to be superseded.

The Karens welcomed the English rule in this district as in others chiefly because it freed them from the Burman yoke both religious and political. At first Karens were numerous in the Pegu Light Infantry, but by 1858 for reasons not recorded they had dropped out. At the time of the annexation of Upper Burma many Karens near the River who belonged to the Henzada Mission joined the Karen levies who did such good work in Henzada. The Karen Circle *thugyi* of Taungbohla (Singu village, west of Wethlague Station), Ko Lun Nyo was the head of all the levies who worked in this district and he had associated with him some six other Karens who all became Head Constables with companies of fifty to sixty men under their command. They did scout work on the hills especially on one occasion when they waited on the Yomas east of Nattalin for a dacoit who was reported to be crossing over to this district. This dacoit, the "Pegu Pângyi Bo," never appeared on this side and so their expedition came back empty handed. Ko Lun Nyo was in Government employ for more than a year, and was rewarded by being presented with a revolver. But the Karens who were first enrolled soon got tired of the work. The parties near the hills undoubtedly kept gangs from establishing themselves there and they attacked and dispersed one gang which seemed likely to assume large proportions; but on the whole they did not do much in the way of hunting dacoits. Karens in this district were not numerous; and they had no missionaries working actually among them, and they were not on the same terms with officials as were the Karens of Henzada. They were timid and only useful when more numerous than their opponents; and there were complaints that they forced labour and took food without payment. In April 1887 the Deputy Commissioner reported that the so-called Karen levies consisted not of Karens but of Burmans and

Yabeins. It seemed a mistake too to show a distrust of the Burman, to set one race against the other ; so no more Karen levies were raised. Instead the Chief Commissioner directed the raising of a Burman levy of a strength not exceeding 300 men which "might be the nucleus of a company of Burman military police." Steps were taken to enrol these and arm them with Enfield rifles, and fifty-one were enlisted in a short time for three years ; but the Chief Commissioner's hopes were not fulfilled. In March 1888 ten parties of Karens were enrolled to pursue and follow up dacoit bands, but they were so unsatisfactory that seven parties had to be disbanded in May, when another broke up voluntarily. Without proper European supervision the Karens were rowdy and disorderly and inclined to display race animosity towards the Burmans. Small parties of eight or ten attached to each European Inspector were then tried and in this way proved themselves useful*.

Other Races.

The Chins who numbered 1,386 in 1911 are of the tame variety, living as a rule in the villages in the broken plains at the foot of the hills. Occasionally an old woman may be seen whose days of maidenly beauty are recalled only by the tattooing which covers her face. The Shans, save that they frequently have gardens, are not distinguished from the Burmans ; the Chinaman plays the same part as he does everywhere in the province ; the European community is composed almost entirely of officials and missionaries and the railway staff at Letpadan.

CHAPTER IV.

AGRICULTURE.

Cultivat- ed area.

There is no record of the number of acres under cultivation in 1851-2 before the British occupation but some estimate can be made from the record that the tax of 25 to 30 baskets of rice for each yoke of buffaloes amounted in Sarawah to 17·43 viss of silver and in Tharrawaddy to 200 viss. Reckoning one viss of silver as Rs. 130† and the price of paddy as two annas *per* basket (this is the lowest price for Monywa 1851-2 and the price therefore

* *Vide letter from Commissioner of Pegu at page 824, Supplement to Burma Gazette, 1888.*

† This value was assumed by Colonel Spearman in 1879—80 in his *Gazetteer of British Burma*.

which would prevail at harvest time) an area cultivated by 38 yoke of cattle is represented by each *ziss* of silver, or at 8 to 9 acres *per* yoke (the present scale) some 325 acres. Thus the cultivated area was about 5,600 acres in Sarawah and 65,000 acres in Tharrawaddy; a total of 110 square miles or so.

At first in the disturbances connected with Gaung Gyi cultivation seems to have nearly died out, but it revived soon after peace was restored. In 1853 the principal crops were paddy, sessamum, cotton, indigo and some miscellaneous vegetables and fruits. In 1878-9 when the present district was reformed the numbers of acres under the various crops were as follows:—

Principal crops.

Rice	... 149,372	Mixed fruit trees	1,521
Oilseeds	... 2,832	Chillies	... 642
Cotton	... 138	Peas and pulse	... 3,565
Indigo	... 37	Maize	... 256
Tobacco	... 1,443	Mixed	... 4,785
Plantains	... 774	(Taungyas)	... 2,812

The areas under rice and oilseeds were increasing, that under indigo and cotton decreasing; indigo vanished completely in 1880; sugarcane has since entered on a small scale. The yield of rice was said to average in 1878-9 some 780 lbs. *per* acre but this is difficult to believe as the neighbouring district of Henzada was reported to yield 2,500 lbs. on an average and the present yield, after cultivation has spread to the less fertile parts, is still about 1,800 lbs. The average rental value of paddy land was then Rs. 3 *per* acre, the highest in the Pegu Division; Bassein came next with Rs. 1-7. In 1880-81 this rent had risen to Rs. 7 but in Henzada it was Rs. 9. After that cultivation increased rapidly until a few years ago when practically all the profitably culturable area had been taken up, rather over half a million acres being cultivated. The extensions possible now are mainly into flooded lands as these become silted up and available for cultivation. The areas under the principal crops in recent years are shown in the B Volume of this Gazetteer.

The soil is generally fertile and with the rainfall received no irrigation is required or practised. Near the Myitmaka valley where floods are common there are some protective bunds on a small scale. Rice is by far the most important crop occupying nearly 96 *per cent.* of the cultivated area. It is grown according to the usual transplanting method.

Rice crops.

The ground is "ploughed" with a harrow seven or eight times in the first month or so of rain, and sometimes gone over with the *settōn*; in some places it is genuinely ploughed with the Burmese plough.

The holdings are rarely large but it is common to find two yoke of cattle working one holding. There is no distinct landlord class; men move from landlord to tenant or to labourer and back again comparatively freely. The principal kinds of rice grown are of the medium lived varieties, the commonest being *letywesin* and *emata*. *Kaukyi* which furnishes the best table rice is grown for home consumption whenever the holding contains suitable land; some *kaukhnyin* or glutinous rice is sown as usual to feed labourers and for the early morning meal during the seasons of heavy field work. There are no records of what were the varieties originally grown in the district; in 1858 Mr. D. F. Lonsdale, who was the Extra Assistant Commissioner at Sanywe, introduced a superior description of rice from the Tenasserim Provinces which suited the soil and climate and gave a good return. The people were said to "appreciate the benefit conferred upon them," but we are not told whether they adopted the new variety to any extent, nor is the name of it given.

Cotton.

In the early days of the British occupation great efforts were made to establish cotton cultivation in the Province. The cotton originally grown in Burma was the same as is grown now, *Gossypium herbaceum*, which produces a fine but very short staple. Experiments were first made in Tharrawaddy in 1855-56; some *Pernambuco* seed germinated but the result was a failure. Experiments were again tried in 1858-9; in other districts there was no success; but in Tharrawaddy, where upland seed was used, the Deputy Commissioner (Captain M.B.S. Lloyd) reported that he was inclined to take a favourable view of the results, and had no doubt that under the management of an experienced planter the outturn would be plentiful. He added however that the inhabitant would not be persuaded to take to the culture of foreign cotton. In 1860 an experiment was tried again at Myodwin where four acres were sown with three varieties. "Sea island" yielded a few plants; "upland" failed; the soil, which was a stiff clay appeared unsuitable. Some "New Orleans" seed sown elsewhere in a light sandy soil yielded a fine crop equivalent to 125 lbs. per acre. But in 1865-6 the Administration Report stated that though the experiments in raising cotton from acclimatised "New Orleans"

seed had been continued, the results were not encouraging. Judging from the statistics of cultivated areas cotton seems to have given place to *sessamum*.

Experiments with Java and Cuban tobacco were tried in Tobacco. 1858, but the people thought these foreign varieties gave smaller returns by weight than did the indigenous varieties, which still continue to be grown without improvement in quality even by selection of seed. Havana seeds have frequently been distributed by Government but without success. Tobacco is now grown on alluvial lands after the floods have receded, or in some cases after paddy has been reaped, near the Myitmaka and Irrawaddy. It is a fairly important crop since the yield of this district represents one-fifth of that of the province and the crop occupies about 6 per cent. of the total tobacco area of India.

Sugar cannot be said to be a principal crop. It is Sugar. grown in small gardens chiefly in the northern half of the district ; and in other places generally on land newly opened up. It thrives well on the rich virgin soil and breaks that up well for paddy to be grown afterwards. The juice is extracted and boiled in the garden to make *kyantaga* which is sold locally as a sweetmeat. Generally the cultivation is carried on by Shans.

Miscellaneous vegetables are grown in the alluvial deposits on the west especially near Monyo : in the *kwins* on the edge of the flooded tract too melons and cucumbers, chillies, tobacco, tomatoes and brinjals often intermingled are grown after the paddy has been cut. A few custard-apples of good flavour grow near Kunhnaywa and excellent plantains near Nattalin ; but the supply of both is small. The Tharrawaddy Burman does not trouble much about vegetable or garden cultivation ; he buys mostly from the Shans. These came into the district for gardening purposes it is said in 1878 after the railway was opened ; but their Settlements would seem to have been chiefly further south on the Insein Kôndan from which they can readily send their produce to Rangoon.

Miscella-neous.

Experiments in jute were tried in the early eighties in Lower Burma including Tharrawaddy and at first promised so much success that Government persuaded a Burman in Rangoon to agree to buy all jute brought to him, guaranteeing him against loss while fixing a minimum price of Rs 20 per 100 viss. But in 1883-4 the failure was so great that jute was not tried again in the district. Sunn hemp was tried in 1895-6 again without success. Tea was tried in 1895-6 on the Yoma just at the edge of the rice

Other experiments.

plain; as the result is not recorded the matter was presumably a failure. Wheat was tried from 1882-4 on the alluvial lands near the river. It was found that its yield was uncertain and rarely heavy; it would not pay to grow wheat on land which could grow rice, though it might pay to grow it on alluvial lands occasionally. In 1882-3 experiments with reaping machines were tried in Tharrawaddy in the presence of the Director of Agriculture. They failed on account of the smallness of the fields, the moistness of the land surface at reaping time and because as the paddy all ripened almost simultaneously a large number of machines working for the same short period would be required.

Cattle.

There are no special peculiarities of breed. Oxen are more generally used than buffaloes because they are of use for more general purposes as well as ploughing. In 1852-3 their prices were—buffaloes Rs. 15 to Rs. 17 each, oxen Rs. 25. In 1860 there was a scarcity of cattle in the province threatening to become a serious impediment to progress but in 1871 when the supply became sufficient again prices were Rs. 90 and Rs. 80 respectively compared with averages of Rs. 51 and Rs. 63 for the province. In 1878-9 the district contained 36,735 buffaloes and 50,504 cows and bullocks; the number of buffaloes is still about the same but oxen are twice as numerous. Cattle disease is not specially prevalent; but there were local outbreaks in 1899-1900 and rinderpest was rife in 1905-6. There are cattle-markets at Nattalin, Zigon, Minhla, and Tharrawaddy but probably the majority of cattle-sales are effected by vendors from Upper Burma as they pass along from village to village.

Ponies.

Ponies are often kept by wealthy cultivators but the climate is said to be not very suitable for them. A Sumatran stallion was kept at Tharrawaddy from 1897 onwards and in 1901-2 it was said the Burmans attached great value to this. Later on two Deli stallions were kept and it was uniformly stated in the reports that these were satisfactory till 1908. In that year only a few foals were dropped and it appears to have been thought that they were not successful after all as they were then auctioned. They are said to have been the wrong type of animal. The first Deputy Commissioner in 1853 reported that in Burmese times in the Sarawah division a few ponies were bred.

Five veterinary assistants have been sanctioned for the district, but as only two are available no great success can be expected of them.

Agricultural loans are and always have been very popular in this district, amounting to about Rs. 25,000 *per annum*. In 1899 there were 569 applications of which 553 had to be rejected for lack of funds; and in every succeeding year the eagerness of the people to secure these loans has been remarkable. There are few agricultural Co-operative Societies in the district at present; but emissaries of the Co-operative Department have endeavoured to spread a knowledge of the nature of those institutions and are waiting for the idea to grow in the minds of the people. Thus the only cheap loans are those made by Government. A special feature is found in the loans of Rs. 25 to Rs. 30 made to the "kaing" cultivators, who grow miscellaneous crops on alluvium, on joint mutual security; these are much appreciated and are said to have ousted the chetties from Monyo township.

Agricultural advances.

Irrigation is not practised on any scale as it is not required. Small bunds to retain water for a holding are sometimes made by the farmers. A note of one large embankment protecting against flood has been given in Chapter I in the description of the Irrawaddy floods.

Irrigation.

The average area ploughed by a yoke of cattle is 8·73 acres. Nearly 88 per cent. of the land is worked by single-yoke cultivators, and there is little farming on a large scale. Thirty-eight per cent. of the land is worked by tenants. Rents are usually a fixed amount of unhusked rice, sometimes a fixed sum of money. The average rental value of rice-land is Rs. 12, a high figure: but in bad years landlords are willing to accept a reduced rent. Nevertheless there is a clear distinction between the standard of living of the tenant and of the cultivating owner, the former being little above the landless labourers.

Occupancy.

Most of the old and considerate customs of a less strenuous age have passed away with the entrance of Tharrawaddy into the world market. The old custom of *letsa* or mutual help in agricultural operations has disappeared. The custom of giving up occupied land for house sites is quite forgotten. There has still to be a certain amount of give and take in allowing the owner of an interior holding to have access to it during transplanting and reaping, but even these concessions are grudgingly allowed. In cases of succession to and division of ancestral property, custom has been replaced by the law as administered in the courts of the district. Revenue Surveyors are often asked to divide inheritances when measurement is necessary. When division is impossible,

Agricultural customs.

one heir usually buys out the others. The appreciation in the value of paddy land, and the increase of the pressure of population are causes of the disappearance of old rights and customs. Another reason is the replacement of the *taikthugyi*s by village headmen. The new men have not yet acquired sufficient influence and status to enforce their decisions, and thus many small customs which a villager formerly feared to disregard are now neglected with impunity. In this way many old paths and bits of grazing have come under the plough and claims of a public or private right-of-way ignored. The Revenue Surveyor has unfortunately taken the place of the *taskthugyi* to some extent in the people's minds, since he now makes the assessments once made by the *thugyi*.

CHAPTER V.

FORESTS AND MINERALS.

Early Administration.

Even before the second Burmese War the forests in Tharrawaddy were being worked. A large quantity of timber had been cut in Pegu before the province was annexed; and while Government adopted protective measures, it had also to recognize the rights of the timber traders who had been in Pegu before 1852. Soon after the annexation all forests were declared to be Government property, and all timber removed after 30th May 1853 from the Hlaing, Paunggyi and Paunlin forests was liable to be confiscated. A year later (1854) notifications were issued ordering owners of timber to register it, forbidding the felling of teak without a license and calling the tenders for felling teak and bringing it to Rangoon. Earlier in the year (February 1854) Sanywe, Teindaw, Monyo and Yegin-Mingyi had been selected as stations at which timber coming down river was stopped. In 1854 too further rates on timber were fixed. It was found that the earlier orders of 1853 had caused serious hardship because timber cut before the annexation, which under the Burmese regulations was treated as private property, had practically been confiscated by Government. Accordingly in November 1854 the removal of timber felled before 20th December 1852 from the forests in Pegu province was sanctioned, but duty was imposed on it. This concession was granted only up to 1st January 1856. From 1856 onwards all teak in

the forests, whether felled or not, was considered to be the property of Government. The new rules were published in October 1856 and a system for conserving and extending teak forests was introduced; leases for extraction of timber were issued for a fixed term of years. In 1861-2 the plan of working the forests by private enterprise was further developed, but the arrangements made in Tharrawaddy are not quite clear: in 1862-3 all the teak tracts in this part were worked by private agency. A timber station was established at Myodwin which became the headquarters of the Forest Department in Tharrawaddy, and land for the purpose was reserved in January 1862.

In Chapter I mention has been made of the difficulty experienced in keeping the streams open for timber-rafting. This difficulty was early realized and in 1860-61 rocks which obstructed several branches of the Bilin and Thônze streams were blasted in order to allow timber to come down. About the same time Dr. Brandis reported that about one-half of the trees in the Tharrawaddy forests could not be floated away because of the natural obstructions either of rock or silt which blocked up the streams. In 1864-5 we have a record of the clearing of the Bawbin stream but by 1868-9 it had again silted up. In the latter year obstructions had to be removed by blasting in the Bilin and Taungnyo forests and some of the southern *chaungs* also had to be cleared. An early cessation of the rains in this year resulted in many logs being heaped in Tharrawaddy in several branches of the Myitmaka when about to enter that stream. Blasting on the Taungnyo *chaung* was again necessary in 1874-5. A full account of this *chaung* had been given in Chapter I, and the serious block which occurred in 1891 at the point where it crosses the Paungdè-Tapun Road has been mentioned. But this *chaung* is by no means unique and the care of water communications forms a considerable part of the Forest administration of this district.

In 1910-11 the Wègyi boom and the Bawbin training works were started. A tramway opened at Tapun was successful in clearing many logs from ground deserted by streams, and in 1913-14 a channel was cut by Tapun and the Mogyaungdin Yo was cleared. These numerous works serve to indicate the magnitude of the teak, but in spite of all that has been done the difficulties in the way of rafting timber have not been surmounted. The report by Mr. F. A. Leete, Conservator of Forests, Rangoon, on the silting up of streams in Tharrawaddy in 1914 shows this clearly.

Difficulties of
water
communi-
cation.

About 1909 the departmental extraction of teak in the Zigôn and Tharrawaddy divisions was in a bad way, more or less moribund in fact. Contractors and elephants dropped out, without being replaced, to such an extent that it almost seemed as if business would come to a standstill. Special reports were called for by Government. The unsatisfactory state of affairs was reported to be largely due to the system of "stump to Sanywe" contracts, the length of time required for logs to reach Sanywe and the impossibility of making adequate part payments for want of a staff to check the amount of work done. Special officers were posted as timber assistants and contracts were virtually split up into two parts, "stump to Thègaw" "and Thègaw to Sanywe" respectively. Since 1900 the first part has in many instances been further reduced to delivery on the banks of floating streams.

A fruitful cause of obstructions is the neglect of timber contractors to keep the rivers open, and it is now proposed that this work should be done departmentally.

In 1865 the Forest Act was passed and new and more stringent rules were enforced. At this time the five Forest divisions in Burma were Tharrawaddy, Prome, Southern, Sittang and Salween. Of these the Sittang Division was the largest, comprising less than half the total forest area, while Tharrawaddy came second and comprised fully one-fourth of the area. The area of the Tharrawaddy division was 2,200 square miles and its boundaries on the north and west were the watershed of the Shwelu and the Nawin, and the Myitmaka *chaung* respectively. The Thônzè *chaung* area was not included at first but was amalgamated with the division in 1874.

The forests in Burma were divided for administrative purposes into two circles, Pegu and Tenasserim, and the Tharrawaddy division was one of the six divisions of the former. Its boundaries were the Irrawaddy on the West, the Pegu Yoma on the east, the south watershed of the Nawin on the north, and the south watershed of the Thônzè on the south. The headquarters of the division were at Prome and the division had about 612 square miles of the reserved forest and a total area of about 800 square miles of forest land. There were no other important administrative changes till 1st April 1906 when the division was split into two, Tharrawaddy and Zigôn.

An account of the most important species of timber trees and their distribution have been given in Chapter I. For the ten years 1905 to 1915 the annual average outturn

Administrative boundaries.

Quantities extracted.

of teak was 23,197 tons; of other reserved woods, 5,978 tons; of unreserved timber, including fuel, 18,681 tons.

The increase in outturn has not been great in the last 25 years for the average outturn of teak for the five years 1886—1891 was 18,411 tons.

Year.	Revenue (local and agency collections).	Revenue.	
		Rs.	Surplus.
1886-7	6,69,004	4,51,065	
1887-8	...	...
1888-9	8,12,259	4,92,860	
1889-90	10,54,441	6,43,892	
1890-1	7,95,898	5,19,180	
1891-2	7,68,134	4,36,676	
1892-3	7,33,992	4,15,233	
1893-4	10,19,599	7,07,397	
1894-5	12,68,257	8,81,137	
1895-6	9,76,093	6,66,113	
1896-7	11,96,238	7,90,629	
1897-8	13,28,983	10,00,969	
1898-9	12,01,081	8,52,507	
1899-00	14,04,424	10,70,256	
1900-01	...	..
1904-05	17,15,700	13,04,286	
1905-06	14,23,509	10,06,235	

The following statement shows the area of reserved Reserva-
tion, forests at five year intervals :—

Sq. miles.	Sq. miles.
1890 ... 877	1905 ... 764
1895 ... 736	1910 ... 792
1900 ... 736	1915 ... 808

In 1865-6 about 90 acres of clearings were made with a view to forming plantations of young teak. In 1868-9 there was a temporary demarcation of proposed reserves and *taungya* cultivation was prohibited in these. At the same time vigorous measures were taken to extend plantations in Tharrawaddy. The earliest reserves, those of Taungnyo, Thitcho and Kangyi, were notified in 1870; and these were followed by the Satpok, Chaungzauk and Tindawyo reserves, notified the first in 1873 and the two last in 1875. The following list gives the names and areas

History
of Reser-
vation.

Tharrawaddy District.

of the reserves in the district with the date of notification:—

Name of reserve.	Area in sq. miles.	Date of notification.	Remarks.
Taungnyo	158	10-5-1870	
Taungnyo Yoma	..	12-6-1893	
Satha extension	7	22-9-1910	
Tapan	8	9-2-1880	
Tapan extension No. 1	192 Ac.	19-3-1913	
Myole extension No. 1	2	"	
Myole extension No. 2	1	"	
Kanthazin	315 Ac.	17-11-1913	
Thitcho	5	10-5-1870	
Kyatgyi	2	20-12-1904	
Bawbin	129	16-4-1878	
Shwepala	3	13-6-1905	
Shwelaung	9	24-2-1905	
Kangyi	8	25-7-1870	
Myodwin	73 Ac.	3-10-1904	
Brandis Plantation	18 Ac.	28-11-1911	
Gamn	98	10-4-1878	
Sathwa	6	24-12-1906	
Taukkyan	5	30-8-1878	
Thakolan	2	27-8-1898	
East Kainggyi	4	16-1-1905	
Chaungsauk	5	21-9-1875	
Minhla	40	16-4-1878	
Mokka	35	"	
Teinhmyok extension	11	16-4-1913	
Satpok	9	30-6-1873	
Sitkwin	2	19-7-1901	
Kandin-Bilin	83	16-4-1878	
Kyini Chaung	5	14-2-1914	
Kon-Bilin	25	29-11-1877	
Nyaungbinzin	11	15-11-1904	
Athayaw	12	11-2-1907	
Thindawyo	10	21-9-1875	
Thewa	3	16-1-1905	
Kanni	4	15-6-1905	
Thonzè	109	2-5-1878	

In forming these reserves the question of *taungya* cultivation had to be dealt with and in 1874 it was finally decided that in demarcating reserves the *taungya* cultivators should be compelled to move beyond forest limits where reasonable compensation in some form would be made to them. At the end of the year 1874-5 the area reserved by Government in the Tharrawaddy Division as teak reserves was 156½ square miles and as fuel reserves 10·97 square miles. In this year we find that arrangements

were made to the headmen of Karen hamlets in Prome and Tharrawaddy districts (the Tharrawaddy forest division included in Prome District) for planting out the *yas* with timber trees, and part of the Minhlā plantation seems to have been planted by *taungya* cultivators. In 1875 the Railway Department was allowed in Tharrawaddy division to enter forests and convert into sleepers all refuse teak below 12 feet in length. Two thousand and forty sleepers aggregating 3,060 cubit feet were thus extracted. In 1878 reserves aggregating 594 square miles were demarcated and sanctioned in Tharrawaddy; the provincial total in this year was 1,410 square miles. There have been no large additions to the reserves but the total area has grown, with certain fluctuations, to 808 square miles.

In the seventies a number of small fuel reserves were made along the line of the Irrawaddy Valley State Railway to provide firewood for burning on that railway. Subsequently coal and patent fuel came into use on the railway so that these fuel reserves were not much utilised. But the proposal to throw them open to cultivation was opposed by the District authorities on the ground that they were required for the supply of firewood to the general public. Eventually a portion was thrown open to cultivation and the remainder kept as fuel reserves. Later it was thought the area kept for fuel reserves was insufficient and a special enquiry was made in 1895-96 and further the Settlement Office in 1900-3 was directed to make a special report on the question.

Originally the idea was to have "grazing grounds under forest"; but this was not successful because while the grounds were not under the control of the Forest Officers the destruction of timber went on so rapidly that the areas tended to become mere scrub jungle. The reserves were then placed under the Forest Department who make a charge for grazing of four annas a month for a bullock and eight annas a month for a buffalo.

CHAPTER VI.

OCCUPATIONS AND TRADE.

Persons dependent on agriculture formed, at the 1911 census, 77·8 per cent. of the total population of the District. This percentage is one of the highest in the Province. The

corresponding figure at the 1901 census was 76·2. Besides the pure agriculturists, there are nearly two thousand persons with whom agriculture is a subsidiary occupation. The number of cultivating owners excluding *taungya*-cutters is double that of tenants, and nearly the same as that of farm servants and field labourers.

There are 11,837 persons dependent on growing of special products and market-gardening. The figure 3,839 for industries with timber must be an understatement, considering the importance of this industry in the economy of the District. It is probable that large numbers of the unspecified coolies are thus employed. There are 6 saw-mills. The number of persons supported by the fisheries is 9,278, one of the largest figures in Burma. The cotton spinners and weavers are mostly Karen women, Burmans generally buying imported cotton-goods. Pottery and brick-making are unimportant, scarcely sufficeing to supply local needs. Although the District is riverine, there appears to be no boat-building.

There is little to be said about the trade of Tharrawaddy. The staple exports are unhusked rice and timber, which travel by rail and river to Rangoon. Cleaned rice is now being exported to a considerable extent from the local mills, amounting in 1914 to over 40,000 tons. The principal imports come by rail from Rangoon, and consist of piece-goods and manufactures of all kinds, salt and European provisions. The importation of luxuries has increased out of proportion, which clearly indicates a rise in the standard of living. There are markets at the eight principal towns along the railway, and at Tapun. Many of the villages have Chinese shops which retail the principal articles of consumption.

CHAPTER VII.

MEANS OF COMMUNICATION.

Railway.

The Rangoon-Prome line formerly known as the Irrawaddy Valley State Railway runs through the district. The project for this was submitted to the Government of India in 1868, work began in December 1874 and the line opened on the 1st May 1877. The portion lying within the Tharrawaddy district was laid entirely along the Rangoon-Prome road which had been constructed a few years before.

Some adjustment of gradients and strengthening of some bridges was needed ; but for the most part the road bridges were utilised and there was comparatively little construction work required. The stations first opened were at Zigôn, Okpo, Minhla, Letpadan and Thônzè ; Gyobingauk was added soon after under the name of Kunhnaywa, and Tharrawaddy station was opened at the end of 1878 when the present district headquarters were established. Since then eight other stations have been opened in the district on this line. In 1886-7 the Bilin river from the Rangoon-Prome road to the Irrawaddy was embanked to protect the line from floods.

In 1900 the Bassein-Henzada-Letpadan branch of the railway was begun. It opened to traffic early in 1903 but was blocked by floods from the end of August 1903 to the 18th November, and again from August to December 1905. The line lay across the line of spill of the floods of that area and in 1905 it was suggested that the eight miles of line beginning from Tharrawaw where the Irrawaddy is reached should be removed. Increased waterways were provided instead and the line retained. In the rains of 1907 however there was an apprehension of a high flood in the Irrawaddy and it was feared that the railway embankment would so confine this as to endanger the embankments protecting Henzada town and an enormous and valuable rice-producing area. Two miles of the line were accordingly dismantled by the orders of Government. The danger passed and traffic was resumed in November of the same year. In 1912 the Local Government paid to the Burma Railways Company a lakh of rupees as compensation for the damage and for the loss of traffic on that occasion. The line is now liable to slight damage in flood times but it is generally possible to get the trains through. From Tharrawaw passengers and goods proceed in a steam ferry to Henzada and thence continue to Bassein or to Kyangin. There is no through carriage provided for passengers, all must change for the steamer at Tharrawaw ; but small goods trucks are sent across without unloading.

The most important road in the district is the Rangoon-Prome road which runs right through the district. The line for this road was selected in 1864 and jungle clearing began on the portions in this district in 1867-8 ; the road was completed in 1872. In 1872-3 the embankments were raised and the surface graded to fit the road for railway formation and in 1874-7 all that portion which lay in Tharrawaddy was taken over by the railway. The Railway Roads.

Department then took in hand a supplementary road to replace the portion (Hmawbi to Paungdè, 101 miles) so taken up. At first the idea was to run the road at the side of the railway, but on the representations of District Officers it was decided that the new road should run a short distance off the railway so as to pass near the larger villages lying only a few miles from the line. The road progressed very slowly ; in 1884 there were still four large iron bridges not yet finished and another not yet begun ; the road was completed only in 1885, the length within this district being 69 miles. Even then there was a gap at the Thônzè *chaung*. Three loop-lines and six feeder-lines were constructed of which $55\frac{1}{2}$ miles were metalled and bridged $16\frac{1}{2}$ miles not metalled but bridged, and the remainder embanked only. The formation width of the main road was 20 feet and the metalled surface nominally about 10 feet wide. In 1892-3 the bridge at Thônzè was started, its cost being estimated at Rs. 71,000. It was completed in September 1894, so closing the last gap which broke the through communication along the road. Most of the small bridges are of timber and are generally in a bad state of repair ; these are gradually—very gradually—being replaced with permanent bridges of masonry abutments and reinforced concrete floors resting on steel girders.

A list of the roads of the district is given at page 7 of the B Volume of this Gazetteer.* The Ôkpo-Mauktama metalled road, eight miles long, must be added to the list of roads maintained by Provincial funds. The Zigôن-Thapangôن road is a portion of the Zigôن-Paungdè loop-road constructed about 1865 ; it has been broken at Thapangôن by the Kantha *chaung* as was related in Chapter I in the description of that river, and the two portions, north and south, are treated as separate roads ; of the northern portion there are six miles in this district which must also be added to the list. It may be noted that the Minhla-Seinkanlan road, the Thônzè-Sanywe road and the Letpadan-Wayôn-binzin road were made in 1874-5, and most of the other provincial roads in 1880-82. Besides the roads shown in the list as maintained by Local Funds, the Public Works Department maintains the roads in the railway towns of Sitkwin, Othègôن, Ôkpo and Inywa, and metalled footpaths generally six feet wide from Zigôن to Thanbaya-gôن (two miles), Ôkpo to Gweghaung ($1\frac{1}{2}$), Letpadan to

* "Nattalin-Kôndan" road of the list should read "Nattalin-Kônta." At Kônta the road joins the Zigôن-Tapun road.

Tazeik (1), Letpadan to Kungyangôn (2½), Minhla to Minhla *chaung* (1¾); Minhla to Sinaing *chaung* (2½); Minhla to Gyogôn (10 feet wide, $\frac{3}{4}$ mile). Of the road from Thôñzè to Sakangyi (5 miles) no more than 2 miles were ever constructed.

The roads in the towns of Thôñzè, Tharrawaddy, Letpadan, Minhla, Gyobingauk, Zigôn and Nattalin are maintained by the local Municipal or Town Committees, having been constructed originally from the District Cess Fund; those in Thôñzè, Tharrawaddy, Letpadan, Sitkwin, Minhla and Okpo date from 1882.

On the whole the road system of the district is for slow traffic superior to that of most Burma districts and communications may be said to be good, judging by the standard which is usually reached in this province. Certainly there has been a great advance since 1874 when the difficulty of communications was so great that on one occasion the Assistant Commissioner and the police were unable for two days to start out to reach the scene of a murder which had been committed; an elephant was provided after that for some years for the Assistant Commissioner's use. The roads are not adapted for light fast traffic but it is doubtful whether it would be worth incurring this expense. As there is no local material for roadmaking except laterite there is a difficulty in constructing good roads. Labour for roadwork seems to get scarcer each year, probably because the rates for other labour have risen so much. Quarries are being worked out and metal has to be brought an ever-increasing distance. The small piece of road about 2 miles long and with a metalled width of 20 feet between Tharrawaddy and Thôñzè is however generally in first class order; and there are at present besides a motor omnibus two touring cars which make constant journeys to and fro between these towns charging two annas for the fare. Cart-hire generally is about two annas a mile on metalled roads and slightly more on other journeys; but the carts are rather small.

The most important waterway in the district is the Water Myitmaka. Before the railway was opened the Myitmaka and the Hlaing (as its lower course is called) provided practically the only means of communication with Rangoon and large boats carried paddy down by this route. The railway has diverted most of the traffic and now only small boats ply on the Myitmaka. Boats laden with vegetables and fish come along the Myitmaka to supply the Letpadan market and timber and bamboos are rafted down. The

Taungnyo, Bilin and Kadin *chaungs* are also useful as a waterway for timber.

The Irrawaddy forms the western boundary of the district and local Irrawaddy Flotilla launches ply on it daily.

Rest-houses.

The Public Works Department maintains bungalows at Letpadan, Minhla, Gyobingauk, Zigôn and Nattalin railway stations and at Tapun, Monyo and Zibwe. There are District Bungalows maintained by the District Cess Fund at Sanywe, Gamônzeik, Tharrawaw, Yegin, Sitkwin, Othègôn, Ôkpo and Teinmyôk, and there are 25 Forest Department rest-houses which are sometimes available to the non-official traveller.* At Tharrawaddy there is a dâk bungalow at which a cook is kept, and a circuit-house ; the latter is in course of replacement by a new building after which it will be made a Public Works Department bungalow. *Zayats* are often spacious and in many places afford tenable quarters ; but the traveller occasionally suffers the disappointment of finding no *sayat* at all even in a village of fair size especially if most of the people near are Karen Christians.

Post Office.

The postal authorities unfortunately have no record of the early history of postal business in the district ; the following account is necessarily incomplete as it has been gleaned from chance references in various documents.

A post office was first opened for the Tharrawaddy District at Henzada in 1853, mails being carried by the steamers leaving Rangoon fortnightly for the stations on the Irrawaddy up to Thayetmyo. In 1856 there was a telegraph office at Mingyi and presumably there was a post office there too ; probably it was opened when Mingyi became the

* These are situated at the following places :—

Damangè.	Bawbin.	Seywa.	Nyaungbinzin.
Magyibin.	Shabyugôn.	Sungôk.	Hmyachaung.
Kangyi.	Tanbingôn.	Kyaukkwet.	We.
Sangyi.	Waing.	Kywemakaing.	Kyauktwin.
Singale.	Zigôn.	Yetho.	Ôkshitkôn.
Myodwin.	Thapan-chaunggyi.	Panhlete.	Thinaing.
Kunsan.	Nyanle.	Kôkko Myaung.	Kyabutè.
Kodugwe.	Gônnyinwâ.	Tanbingôn (Minhla).	

district headquarters in 1854 but there is no record of this. In 1868-9 the river steamers began to run weekly, calling at Henzada, Myanaung, Prome, etc.; in 1869-70 they ran nominally every ten days but were in fact very irregular; in 1870-71 a regular weekly service was renewed and continued till 1876 when the service became bi-weekly. Meanwhile a district dâk-line was established by which letters were sent daily from Thônzè to Henzada, and received daily in return. Later, in 1880 a daily dâk between Mingyi and Gyobingauk (on the railway) was established at the request of the Assistant Commissioner at Mingyi (the late Lieutenant-Governor, Sir Harvey Adamson).

When the railway was opened in 1877 it began at once to carry the mails. In 1880-81 the sub-post office at Thônzè was removed to Tharrawaddy where a new office building had been erected. In the same year arrangements were begun for placing district posts under the control of the Postal Department and several new district post offices were opened then and in the next year or two. The post offices now open are at Tharrawaddy, Thônzè, Letpadan (opened in 1884), Sitkwin, Minhla (opened in 1885), Othègôn, Okpo, Gyobingauk, Zigôn, Nattalin, Monyo, Tharrawaw; all these are subsidiary to the District Post Office at Prome.

Originally the post office was not used by Burmans, but they came in time to see its uses and now make use of it as freely as do Europeans.

The telegraph line from Rangoon to Henzada was opened on the 3rd January 1856 and a short time later an extension from Henzada across the Irrawaddy and *via* Mingyi (where an office was established) to Prome was in working order. In 1863 this extension was replaced by a line from Henzada to Prome along the west bank *via* Myanaung and Padaung; the Mingyi office was then closed. In 1872 on constructing the original road from Rangoon to Prome a line along this road was substituted for the old one *via* Henzada; this had branches to Myanaung and to Henzada but there is no record of a telegraph station existing within the present Tharrawaddy District at that time. As the railway was made on this road no change of the line was made in this district. A combined post and telegraph office seems to have been opened in Tharrawaddy in 1899, but this was probably only a new building. Previously the railway telegraph was frequently used but there is no record as to whether any offices besides railway stations were working.

CHAPTER VIII.

GENERAL ADMINISTRATION.

The
principa-
lity of
Tharra-
waddy.

The present district of Tharrawaddy formed in Burmese times shortly before the British annexation the principality of Tharrawaddy and also the division of Sarawah. A small strip south of the Thônzè river belonged to Hanthawaddy. Tharrawaddy principality was generally an appanage of a senior member of the royal family; in 1852 it was combined with Sarawah and Myanaung under the government of Maung Po who communicated directly with the Court at Ava. In May 1853 the Deputy Commissioner who had charge of it reported that the principality contained three large towns, namely Monyo, Mingyi or Laukatsayah and Tharrawaddie "all in ruins at present" as a result of the operations of the outlaw Gaung Gyi. The last named was the village now known as Myodwin, the home of Kônbaung-min during part of his retirement in the early thirties. The principality extended from the Tumyaung *chaung* on the north to the Thônzè *chaung* in the south, a distance of twenty leagues, and from the Yoma on the east to the Irrawaddy on the west—a distance of thirty leagues—except the small strip which formed the division of Sarawah. It was divided into twenty circles which were grouped into two divisions, each with its own *sit-kè*. The headquarters of North Tharrawaddy were at Mingyi, those of South Tharrawaddy at Monyo. Another account mentions 32 *taikthugyis*; the discrepancy may be explained perhaps by the mistake often made by the first British officers in the difficult circumstances of the first occupation of recognising claimants to this rank who were not properly entitled to it. The inhabitants were estimated in 1893 at 10,000 occupying 2,500 houses.

Sarawah.

Sarawah extended from the Kyienchaung rivulet on the north to the Mangan *chaung* on the south—a distance of 8½ leagues—and from the western boundary of Tharrawaddy on the east to the Irrawaddy on the west—a distance of 3 leagues. The population was estimated at 3,500 in 1852 consisting of Burmans, Talaings and Karens. "The principal crops" Captain Smith reported "were paddy, till, cotton, indigo, onions, capsicums, sweet potatoes and *ngapi* (sic) and fruits." Buffaloes and oxen were numerous and a few ponies were bred there. Sarawah like Tharrawaddy was always in a disturbed state in Burmese times, and it was

chiefly in these two divisions that the new local administrators found themselves carrying out the order which the Governor-General included in his letter forwarding the annexation proclamation to his Agent in Pegu, to the effect that early and severe measures would be taken "against the bands of plunderers who have wasted and will long infest the lower provinces unless vigorous measures are taken against them at the outset."

The proclamation of the annexation of the province of Pegu was issued on the 20th December 1852 three days after the *coup d'état* of Mindôn Min. The portion of the annexed country which lay east of the Sittang was added to Tenasserim; the remainder constituted the province of Pegu. Within Pegu the former territorial divisions were maintained as far as possible. Of the four districts formed one was Sarawah consisting of the Sarawah division and the area governed by Maung Po, namely Tharrawaddy and Myanaung, the last named being practically the present district of Henzada. Each district was placed in charge of a Deputy Commissioner on a salary of Rs. 1,000 *per mensem* with a boat allowance of Rs. 100 aided by an Assistant Commissioner on a salary of Rs. 500 with a boat allowance of Rs. 60 *per mensem*. The first Deputy Commissioner of Sarawah was Captain Josiah Smith of the 13th Madras Native Infantry who assumed charge on the 27th January 1853. He was assisted by Lieutenant Dangerfield for a very short time, then by Lieutenant D'Oyly till that officer went to Paungdè in 1854 and was replaced by Captain David Brown. The district was generally referred to as the Tharrawaddy District and Captain Smith as the Deputy Commissioner of Sarawah, but the names of Sarawah and Tharrawaddy were still used also for the Burmese areas of those names.

The organisation of the Tharrawaddy District was on the same lines as that of the districts of Rangoon, Prome and Bassein. A *sit-kè* with only judicial powers, civil and criminal, appointed by the Commissioner on the nomination of the Deputy Commissioner, and paid a salary of Rs. 200 *per mensem*, sat at Sarawah (Tharrawaw). In addition it was proposed to appoint *gaung-gyôks* for divisions, *thugyis* of circles, and "gaungs or police jemadars for the several quarters of those towns where they may be necessary." At first it was intended that the *sit-kè* should be a native of the country but this condition was dropped almost at once and applied only to *gaung-gyôks*, *thugyis* and *gaungs*. The *thugyis* and *gaung-gyôks* were to be nominated by the

Under
early
British
Adminis-
tration.

Deputy Commissioner and appointed by the Commissioner; *thugyis*, who were generally the old *myothugyis* or their sons, were to receive ten *per cent.* on their revenue collections and to pay their own establishments and other expenses, while *gaung-gyôks* were to receive fixed salaries not exceeding Rs. 100 and to have their establishments provided for them. In all respects in which particular orders were not issued the rules and practice of the Tenasserim provinces were to be followed. In carrying out these arrangements one *gaung-gyôk* was appointed to the charge of the Sarawah township with headquarters at Monyo. He tried all civil suits up to a value of Rs. 500, and investigated all criminal charges brought to his notice by the direct accusation of the parties injured or otherwise. Civil suits exceeding Rs. 500 in value, except (1) those exceeding Rs. 3,000 and (2) such as the Deputy Commissioner for special reasons desired to hear himself, were to be tried by the *sit-kè*; cases of the two classes excepted were tried by the Deputy Commissioner. In civil suits the court of the Deputy Commissioner was also the only court of appeal against the decisions of the *gaung-gyôk* or *sit-kè*. The *sit-kè* also received and tried all charges of simple theft of property not exceeding ten rupees in value, assault, affray, wounding, tumultuous assemblage, abusive language and the like arising within his jurisdiction or referred to him by the Deputy or Assistant Commissioner; he was empowered to sentence to imprisonment with or without labour for a period not exceeding one month, or to a fine not exceeding thirty rupees commutable if not paid to imprisonment with or without labour for fifteen days. The *gaung-gyôk* too was empowered to punish assaults, abusive language and similar misdemeanours with fine not exceeding twenty rupees or confinement in the stocks for twelve hours and in the case of petty thefts by confinement in the stocks for twenty-four hours. In all matters of police, *thugyis* acted in direct subordination to the *gaung-gyôk* and took any persons apprehended by them to the *gaung-gyôk* forthwith. *Gaungs* of the quarters of towns were in like manner to apprehend and convey offenders to the Deputy Commissioner.* There is a record of the appointment in February 1853 of four *gaungs* in Henzada town with salary of fifteen rupees a month, but no record of *gaungs* in any town on the eastern side of the district has been traced. Instead the term *gaung* was soon after used to represent a petty

* Presumably this was intended to apply only at the headquarters of the Deputy Commissioner or his Assistant, i.e., to Monyo.

village head who assisted the *thugyi* of the circle in his revenue work but was primarily a rural police officer on regular pay. By 1865 the *gaung* had lost all judicial and fiscal duties and was purely a paid rural policeman having jurisdiction through the whole or part of a *thugyi*'s circle ; * the *thugyi* had apparently become a revenue officer without any police duties *qua thugyi*. With these *gaungs* were associated *kyedangyis* who were primarily revenue officers under the *thugyi* but assisted in police work ; they received no pay but were exempted from capitation-tax. They had to assist the *thugyi* generally, but might not be required to prepare assessment rolls or make actual collections, nor might they be called away from the village.* Before the British occupation *thugyis* of circles had held their offices on an hereditary tenure. This practice was continued ; but, taking advantage of the ignorance of British officials as to former conditions, and of their readiness to admit hereditary tenure, many village headmen got themselves registered as *thugyis* of circles so that finally many of the circles became so small that the revenue derived from them did not furnish a sufficient percentage for the *thugyi*'s support. This system soon crystallised into a system of *myooks* of townships, *thugyis* of circles, *yazawut gaungs* of circles or portions of circles and *kyedangyis* of hamlets ; its further development is traced in the article on Police.

The difficulties of the pursuit of Gaung Gyi and the suppression of the other dacoits of that time led Captain Smith in July 1853 to propose making the portion of Sarawah District which lay east of the Irrawaddy into a separate "Tharrawaddie" district, and this was actually carried out on the 7th July 1854 when Captain David Brown, Assistant Commissioner, was placed in charge and given the powers † of a Deputy Commissioner. For headquarters Monyo and Yegin were suggested and the latter preferred because Monyo could only be reached by steamers when the water was unusually high. As Yegin was liable to flood the headquarters were actually placed at Mingyi about two miles inland, and a court-house, jail and barracks, a road to connect Yegin and Mingyi and a bazaar at Yegin were put in hand at once.

Separation from Sarawah District.

* Fryer's Manual, 1867, page 186, and the sections on Police in the next chapter of this volume ; and British Burma Gazetteer, 1879, Volume I, page 485. The latter is not quite correct, the former has the actual orders.

† But not the remuneration.

**Reunion
with
Henzada.**

Gaung Gyi was disposed of in 1855 but the district was unsettled for some little time after. When tranquility was restored it was found that a great part of the population had disappeared, while a considerable part of the district was apparently destined to remain a wilderness ; and in 1860 when all the establishments in the Province were revised it was thought unnecessary to retain a separate Deputy Commissioner and his staff for a district producing so little revenue, litigation or crime as Tharrawaddy, while by uniting it with Henzada some convenience in police arrangements might be attained and the number of myooks in the two districts reduced from 13 to 8. In June 1861 the Government of India called attention to the fact that the union of the two districts had not yet been effected ; the scheme was then expedited and was carried out on the 30th July 1861 when Henzada and Tharrawaddy were again united as in the old Sarawah district. But the headquarters were now at Myanaung, the Assistant Commissioner of Tharrawaddy which now formed one subdivision residing at Yegin-Mingyi. On the 31st March 1870 the headquarters of the district were removed to Henzada.

**Early
Town-
ships.**

The townships which existed in the very early years are not shown in any records now existing. Sarawah or Monyo township was formed in 1853 as recorded above ; the Tapun township was formed in 1854 during the campaign against Gaung Gyi ; the Mingyi township probably was also formed in 1854 when the new district of Tharrawaddy was formed ; of Sanywe there is the record that in 1855 the President in Council granted permission for the Extra Assistant Commissioner in Tharrawaddy to reside at Sanywe. Other townships may have been formed between 1854 and 1861 but after the reduction of myooks in the latter year the four townships in the Tharrawaddy subdivision were Sanywe, Monyo, Mingyi and Tapun, and these continued so until 1880.

**Tharrawaddy
consti-
tuted a
District.**

As soon as it became clear that even in Tharrawaddy life and property were secure, part of its inhabitants returned to their former homes while new settlers came from other places. Land was taken up in every direction and the task of administration grew so large that in 1873 Captain Plant, then Deputy Commissioner of Henzada, proposed to make a separate district again of Tharrawaddy, pointing out that even so long before as 1808 the Government of India had admitted the advisability of splitting up the Myanaung District. As it was thought that two Assistant Commissioners controlled from Henzada would

be sufficient to administer the Tharrawaddy side, Captain Plant's proposals were rejected. But the subdivision continued to be in the charge of a single Assistant Commissioner and in 1873-74 received the addition of the Thônzè Circle from the Rangoon District, and so became the area now forming the district. In 1876 the continued increase of work in the Tharrawaddy subdivision coupled with the lack of internal communications (although the railway was nearing completion) which frequently crippled the police and constantly increased the work of administration lead to a revival of the proposal for a separate district. The population then was 225,381. The matter was shelved for a time for lack of officers but in December of that year the Commissioner of Pegu again brought the matter before Government.* The completion of the railway was expected to cause an increase rather than a decrease in the work, and the proposal was accepted ; the subdivision was to be taken as it stood to form the Tharrawaddy district.

The subdivisional headquarters were still at Mingyi; but the formation of sandbanks had rendered this town more and more difficult of access while the railway ran through the middle of the district some distance away. Mingyi too was not centrally situated. A change of headquarters was therefore desirable on the formation of the new district. None of the railway stations Thônzè, Letpadan, Minhla, Ôkpo, Zigân, was thought sufficiently central ; but no place centrally situated seemed suitable for headquarters. Then it was noticed that the bulk of the population was at the two ends, north and south, the centre being flooded in the rains ; and thus it was argued that it would be more convenient to have the Deputy Commissioner stationed at one end of the district and the Assistant Commissioner at the other. The townships then existing were four in number, namely Sanywe, Tapun, Mingyi, Monyo ; and it was proposed to group Tapun and Mingyi into a Northern Tharrawaddy Division with an Assistant Commissioner at Mingyi while Sanywe and Monyo should form a Southern Division directly under the Deputy Commissioner at Letpadan. The location of the headquarters however formed the subject of further discussion. Letpadan was thought to be too low ; it was liable to floods. Zigân had some high

Location
of Head-
quarters.

* Much of this history of the formation of the district is derived from files Nos. 116 and 248 of 1876 in the office of the Commissioner, Pegu Division.

land but not enough. A search along the railway was made and some high land was found by the Commissioner, Colonel Horace Browne, accompanied by the Inspector-General of Police and the Assistant Commissioner, Mr. Weidemann, near Kunhnaywa about $1\frac{1}{2}$ miles from the railway line and "some four miles from the present station at Gyobingauk which the railway officials call Kuhnitywa." This was said to be in one of the most thickly populated parts of the district and to be preferable to either Zigôn or Letpadan as a place of residence for Europeans.

Boundaries of District.

The proposals were accepted by the Secretary of State and under Home Department Notification No. 740, dated the 2nd April 1878, the Tharrawaddy subdivision was converted into the Tharrawaddy District, the orders being carried into effect on the 18th June 1878. The boundaries of the new district as stated in the same notification were however inconsistent with this as they included all that part of Henzada District lying east of the Irrawaddy and so included two circles of the Zalun township which lay on the east of the Irrawaddy but had never formed part of the Tharrawaddy subdivision because they were separated from the rest of the inhabited portion of that charge by a trackless forest swamp. Accordingly a revised notification, No. 1254 of the 10th July 1879, defining the district boundaries was issued to exclude these circles from the new district, attaching them to Henzada instead. Meanwhile under Local Government, General Department Notification No. 237 of the 4th July 1879, two subdivisions were formed, namely Mingyi consisting of the Tapun and Mingyi townships and Tharrawaddy-Myoma comprising the Monyo and Sanywe townships. The headquarters of the Mingyi subdivision were placed at Mingyi; the headquarters of Tharrawaddy-Myoma were at Thônzè.*

Kuhnaywa unsuitable for Headquarters.

Unfortunately the location of the district headquarters at Kunhnaywa was not satisfactory. Captain Forbes who had been appointed Deputy Commissioner assumed charge on the 18th June 1878, and wrote on the 21st June to the Commissioner protesting that the partially erected Court-house (for which Rs. 5,000 had been sanctioned) stood "in the middle of thick virgin jungle exactly resembling a Karen *taungya*. It is surrounded on every side with an almost impenetrable undergrowth of brushwood jungle"

* The authority for this statement of location of headquarters is in Notification No. 238 of the 4th July 1879, which defines headquarters for purposes of registration. No more explicit order has been traced.

and residence there "would most probably be the destruction of my health from fever." Captain Forbes continued that he would submit to this if need be but could not risk the lives of his young family by living there. The new station, he wrote too, was in every way unsuitable "being four miles from the nearest railway station, so that it would always remain as at present a set of forlorn-looking Court-house and offices in the middle of a jungle, or if that be cleared, of an un-occupied bare space." He reported in the same letter that he had stopped the builders of the Court-house and had moved to the Public Works Department bungalow at Gyobingauk where he lived and held Court; and he proposed that Gyobingauk should be adopted temporarily as headquarters and offered to relieve Government in that case of the extra expense entailed by the change by erecting quarters for himself at his own expense. Thus Kunhnaywa retained its greatness for only three days.

The Commissioner agreed to the temporary removal of the headquarters to Gyobingauk but he evidently wished Kunhnaywa to be kept as the permanent headquarters. He denied the Deputy Commissioner's report that the Court-house at Kunhnaywa was in the middle of jungle, saying it was "in the midst of cultivation and close to a village or cluster of villages of 2,000 inhabitants. It might be feverish just at that moment, but that was because the jungle had only just been cut."* The Commissioner sent up samples of water from Zigon and Gyobingauk and asked that a site committee, consisting of himself and the Deputy Commissioner, the Executive Engineer and the Sanitary Commissioner, might be appointed to select a suitable headquarters. The committee was appointed and sat on the 4th September 1878. The Sanitary Commissioner thought little of Gyobingauk and altogether condemned Kunhnaywa. The site of the Court-house at the latter place had been discovered too at the end of July to be a burial ground which had been in constant use until the preceding year. Gyobingauk had the reputation of being the most unhealthy place on the railway; for the last two years cholera there had been so bad that the railway station had to be closed; the water was reported to be bad and scarce.

Selection
of
Tharrawaddy as
Headquarters.

* The phenomenon that a site on which jungle had been cleared was very feverish in the following year was often remarked upon by Tharrawaddy officers. It has been discussed in many places by many authorities, notably by Sir Ronald Ross in connection with malaria investigations.

Zigôn like Kunhnaywa was said to have bad water and to be feverish by reason of the jungle ; the soil and configuration were not favourable to health, cholera had been bad there that year. Sitkwin resembled Zigôn. Letpadan was the choice of Captain Forbes who pointed out that it was already a centre of railway activity and likely to grow. Cholera had recently broken out there, but that was in the old native quarter west of the line. He thought there was sufficient land which would suit if drained. The committee rejected Letpadan because it was low-lying and difficult to drain and had bad water. The next site considered was Ywagyigôn near Thônzè. Here it was reported that water was good and plentiful ; it could be obtained at all seasons at six feet below the surface ; the wells never dried up even in the hottest weather. The site was on a spur of the Pegu Yoma pushed further west than most into the alluvial plain and the drainage was good. Jungle being sparse the work of clearing it would be light and the cleared site would probably not be unhealthy. As the land was waste little compensation would be required by landholders. The soil was excellent for road-making. Bamboos and timber for building were plentiful, coming down the Thônzè *chaung*. Good clay for brick-making was abundant. The committee described the site as might a land agent who wished to sell it. It was also remarked that it would not be inconvenient to have the headquarters at one end of the district as those of the out-subdivision could be placed at the other end. Further it was expected that the Henzada railway line would join the Prome line at this place. The committee accordingly recommended Ywagyigôn ; Government accepted this and the headquarters were moved to this place on the 15th October 1878. The offices were erected temporarily in Thônzè two miles away, the Court-house being on the site of the present dispensary there and the other buildings and residences north of it, along the line of the railway and the present road. In January 1879 some discussion arose as to the name to be given to the headquarters. "Ywagyigôn" was thought inconvenient for Europeans to pronounce and still more so to spell. But the Railway Department had already called its station Tharrawaddy after the name of the district. So the headquarters were called Tharrawaddy after the name of the railway station.

Administrative changes.

Numerous changes have since been made in internal administrative boundaries and arrangements. The headquarters of the Northern subdivision were moved to Zigôn early

in 1881 and about this time the headquarters of the Mingyi township were removed to Gyobingauk; next year the Mingyi and Sanywe townships were broken up and the three townships of Gyobingauk, Tapun and Monyo formed into the Northern Tharrawaddy subdivision with headquarters at Zigôn; while Sanywe and Minhla townships composed the South Tharrawaddy subdivision with headquarters at Thônzé. In 1894 the subdivisional headquarters moved from Thônzé to Tharrawaddy. In 1895 the township headquarters moved from Sanywe, where they had been situated since 1858, to Letpadan, and Monyo township was transferred to the Southern subdivision; the subdivisions were renamed Zigôn and Tharrawaddy subdivisions. In 1903 the Monyo township was retransferred to the Zigôn subdivision and the Sanywe township divided into the Tharrawaddy and Letpadan townships with headquarters at Tharrawaddy and Letpadan respectively. Some minor changes in other boundaries were made at the same time. The next and latest change was the removal of headquarters in the Tapun township to Nattalin and the change of its name accordingly.

It has not been found possible to trace a complete record of the earlier officers in charge of Tharrawaddy. Captain Smith had charge from the beginning on 27th January 1853 till the separation from Henzada on 7th July 1854 when Captain David Brown took charge of Tharrawaddy. In 1859 Captain M. K. S. Lloyd was Deputy Commissioner of Tharrawaddy, and in 1861 Captain C. P. Hildebrand; the latter took charge of the Myanaung District on 30th July 1861 when the two districts were joined, and was Deputy Commissioner still throughout the year April 1867 to March 1868, but whether his charge was continuous has not been ascertained. In 1873 Captain Plant and in 1875 Mr. W. deCourcy Ireland was Deputy Commissioner in Henzada. Meanwhile the subdivision of Tharrawaddy was held by Mr. T. J. Fallon from the 30th July 1861 onwards. On the 18th January 1868 Lieutenant R. F. St. John gave over charge to Maung Maw Gaw, Extra Assistant Commissioner. In 1873 Captain Alexander was Assistant Commissioner at Mingyi, in 1880 Sir Harvey Adamson held that post. A complete list of the Deputy Commissioners in charge of the Tharrawaddy District since its reconstitution in 1878 is given in Appendix I.

There is a record of the number of original suits tried in Tharrawaddy as early as 1857-58; the numbers tried in that year in the various courts are shown in the table

Tharrawaddy District.

below, compared with those for 1860-61, the last year before Tharrawaddy was merged in the Myanaung District :—

Court of	D.C.	A.C.	E.A.C.	Sitkè.	Myoθks.	Total	Remarks.
1857-58	16	...	8	415	735	1,174	Almost the least of all districts.
1860-61	8	...	4	405	1,099	1,516	849 suits compromised, 667 decided on trial.

In 1860-61 only Toungoo District showed less litigation ; Henzada had 4,246 cases. Up to 1859 the law administered was a combination of equity, common sense and Burmese law, the proportions of these components depending on the judge. In 1860 the code prepared by Major Sparks, the Judicial Deputy Commissioner of Rangoon, and based upon Act VIII of 1859 came into force ; and in the same year stamps on law papers were introduced. In the lowest class of suits, where previously a fee of Re. 1 had been charged for each summons, eight annas for each subpoena and Rs. 2 for each warrant, the stamp on the plaint now of four annas in suits for less than Rs. 8, eight annas up to Rs. 12, Re. 1 up to Rs. 16, covered everything in the shape of fees ; the poorest classes were therefore benefited by the stamp law.

Act I of 1863 repealed the Pegu Civil Code and caused the Code of Civil Procedure to have effect throughout Burma.

The Courts now held in the district are shown in the B Volume of the Gazetteer. In the last two years a slight change has been made whereby the District shares a District Judge with the Prome District, the judge being resident at Prome but visiting Tharrawaddy every month, and a Divisional Judge with Henzada, the judge living temporarily in Rangoon while quarters and a new Court are being erected in Tharrawaddy but visiting Tharrawaddy every month. The present Sessions Court was erected in 1897-98.

Registration.

The orders relating to the registration of deeds throughout the Tharrawaddy District ever since the 10th August 1861, when registration was first introduced into the

Province of Pegu, have been those in force generally in that province and afterwards in the province of Lower Burma. An account of these orders is given in the Burma Registration of Deeds Manual 1914, Part V. At first, as in all other districts, registration could only be effected at headquarters, that is, at Myanaung till 1870, Henzada till 1878 and then at the office of the Deputy Commissioner, Tharrawaddy, at Kunhnaywa, Gyobingauk and Thônzè in succession. On the 4th July 1879 the subdivisions of Mingyi and Tharrawaddy-Myoma formed for purposes of criminal administration were at the same time declared registration sub-districts with the Assistant Commissioner at Mingyi and the Assistant Commissioner or Extra Assistant Commissioner at Thônzè as Sub-Registrars. In 1878-79 there were effected at these two offices 58 compulsory and two optional registrations with respect to immovable property (besides some relating to movable property), representing a total value of immovable property of Rs. 38,904. When the district headquarters moved to Tharrawaddy the Thônzè registration office also moved thither. In 1881 in all districts, including Tharrawaddy facilities for registration were given at all township headquarters; thus sub-offices at Tapun and Sanywe were added and subsequently sub-offices have always existed at all township headquarters. The Sub-Registrar at Tharrawaddy is Joint Registrar for the district his office being amalgamated with that of the Registrar for certain purposes. At Nattalin, Minhla and Letpadan non-official Joint Sub-Registrars have been appointed.

Tharrawaddy has a reputation for criminality in all Crime branches, but murder and violent crime, cattle theft and petty thefts are its specialities. Contrary to general opinion this has not always been the case. In 1857 to 1859 Tharrawaddy was the paragon with "less crime in proportion than any other district." In 1860 there were only 19 cases of cattle theft. There was some disorder in 1866-68 and in 1878 due to outlaws from Upper Burma and the Prome District, but the district was generally law-abiding. About 1881-82 when there was a general large increase of cattle theft in the Province Tharrawaddy was not yet specially mentioned in the report; but in 1885 and the following years cattle theft was bad in this district. In 1885 and 1886 began the storm of disorder described in Part III of Chapter II, due no doubt to the unsettling of the people's minds by the war in Upper Burma. Many of them still retained a superstitious reference for the king whom they regarded as a national sovereign. Tharrawaddy too at

the time had 5,382 Upper Burma immigrants—more than any other districts*—it was the nearest district to Upper Burma which offered considerable areas of virgin land to new cultivators. Rumours of reverses suffered by British troops were current in most districts too; and if there was truth in the rumour that emissaries were sent from Mandalay before the war to foster a spirit of rebellion, it may be believed that Tharrawaddy entertained a fair share of these. When the dacoits gangs had been broken up it was found that crimes of violence had only given place to crimes of stealth which began at once to increase largely, especially cattle theft which nearly doubled in 1886 to 1889. This was not peculiar to Tharrawaddy; indeed by 1890 the district had recovered. In that year it was troubled by a small but well-armed band of dacoits from Hanthawaddy led by Po Lu and Po Tu who were both shot in 1891, but although the number of violent crimes increased from 38 to 49 Tharrawaddy was by no means the worst district in this respect; in the next year it showed a temporary improvement and in 1893-94 violent crime fell to 21. Neither did Tharrawaddy merit special mention yet for cattle theft; it was not to be compared with Pegu and Amherst in 1890.

But in 1894-95 there was a change for the worse. There were 28 murders, and violent crimes rose from 21 to 64 cases, placing the district third in the province in this matter. Cognisable crimes of all kinds increased and many false cases were reported. The causes were obscure; a twelve-anna crop in the north of the district combined with high prices of rice due to a combination of millers was noted. In 1895-96 Thartawaddy headed the list with 82 violent crimes, Hanthawaddy being second with 49; these however were principally petty highway robberies, there were no dacoities in the open season of that year. In 1895-96 too cattle theft attained serious proportions in the district. The issue of passes in connection with cattle markets was said to assist the cattle thieves, and the cattle markets were closed. The police were very unsuccessful in dealing with these cases; of 1,147 head stolen in 1897-98 only 192 were recovered and only in one case in five was conviction obtained. But the Village Act was enforced, villages fenced and their gates watched at night, the movements of strangers were watched by village headmen, the cattle owners were persuaded to employ competent herdsmen to graze their cattle, bad characters were made to sign security

* So able an officer as Colonel Street ascribed the disturbances to this cause; *vide* Quarterly Reports of Violent Crime, 1886.

bonds and liberal rewards were given to informers. The result was an improvement not only in cattle theft but in ordinary theft too and in violent crimes; in the latter Tharrawaddy yielded place to Hanthawaddy as the worst district. In 1903-04 the growth of crime was most marked in Tharrawaddy and was ascribed at that time to a failure to apply the Village Act in 1902 and to overwork of the Subdivisional Officers. There was a slight continued improvement till 1907 when a severe epidemic of crime began which lasted till 1912 but seems now in 1914 to be dying away again. A feature of this was the number of cases of kidnapping for ransom which began in 1908 in the neighbourhood of Tapun and Paungdè. In 1910-11 there were 19 cases in two of which victims were murdered. This crime was suppressed but even in 1912-13 a case occurred at Seinza village in which although the ransom was paid the kidnapped boy was not sent back; some days after his body was found in the jungle. The year 1911 was perhaps the worst recent year; cattle theft cases increased from 268 to 443,* an attempt was made to derail a train near Minhla, in the Tapun circle villagers gave shelter to men engaged in abduction. A strange occurrence was a murder committed to obtain human blood for the purpose of making a charm.

Gambling, drink, high prices, poverty, damage to crops by floods and drought, ease of transit by railway, the lack of co-operation between police and headmen, have all been assigned as the causes; so too were the practice of carrying *dahs* at *pwès*, apathy of village headmen due to their insufficient remuneration, the release of prisoners at the Coronation Durbar in December 1911. But all these are secondary causes accounting not so much for the criminality of the district as for its manifestation on particular occasions; and few of them apply with particular force to this district.

In 1853 it was reported that "the Sarawah district was always in bad order in Burmese times.† Of the Tharrawaddy division it was recorded ‡ that "since long before the memory of man the people have been disorderly and rebellious; discontent, disunion and anarchy have often prevailed there." This was ascribed partly to a division of authority between the *myowun* and the *sit-kè* with appeals to the Prince of

* No less than 222 cases were reported at Okpo police-station alone and 115 more at Gyobingauk.

† Pegu Commissioner's letter-book, 1853.

‡ *Idem.* Report by the Deputy Commissioner dated 17th June 1853.

Tharrawaddy. But in 1853 before Gaung Gyi's depredations took place Captain Smith also reported that "nearly all the gang robberies of this district originate in the scarcity of food; the people are forced by absolute want to band together for the purpose of plundering villages and boats known to contain rice, *ngapi* and other necessaries of life." Sir Arthur Phayre in 1853 wrote: "The people used to boast that they made away with their governors when they ceased to be pleased with them, and they were a by-word of the Burmese." An old proverb has it: "A Tharrawaddy man comes to you with a law-book in one hand and a *dah* in the other." In the order of July 1854 for the division of Sarawah into two districts the reason given by the Commissioner for the change was "the unsettled state of the township of Tharrawaddy arising from the disposition of its inhabitants who *from time immemorial*, have been noted as a turbulent and lawless race." The opinion of the Commandant of the Pegu Light Infantry that the Tharrawaddy men were suited to a military life as a result of "the confidence and courage acquired in predatory habits during Burmese times" has been recorded already. These descriptions given sixty years ago necessitate care in accepting recent developments as explanations of the criminality. Some blame Tharrawaddy Min for collecting his followers here in 1837, but this argument was disposed of in Chapter II. Gaung Gyi certainly left many lawless followers when he withdrew across the frontier with only a few companions, but the district was got into order shortly afterwards in spite of the presence of these men. The substitution of lay schools for the old monastic system is supposed to have led to a loss of moral strength in the modern youth who consequently forms ready material for those criminals who organize crimes while taking no active part in their commission. This change is general throughout the province but it may have acted with peculiar force in Tharrawaddy where the people betray a lack of back-bone in many ways. Evil traditions were generated no doubt in earlier times when the bad characters infesting the district were more to be feared than the Government. But there is a noticeable lethargy in the people when the passions are not aroused, a lack of grit and of a grip of things, which may be of climatic or malarial origin, and is exhibited in the low standard accepted in carrying out every day duties or practising the ordinary trades. This may be the reason for the constant failure by the people to suppress the crime in their midst and may account too for the adoption of cattle theft and other

apparently easy ways of obtaining a livelihood. When culturable waste is scarce and the farmers' sons cannot all find a living in the paternal holding a lack of energy and initiative may easily prove fatal to the moral character of some of them. Given a district with people of this character, and with two-thirds of its area covered with dense forest or *kaing* grass jungle affording perfect hiding places, it is but natural that bad characters from other parts will tend to collect there and add to the criminal population.

The explanation of the criminality given by the people themselves is the curse of Me Nyun or Ma Min Ban recorded at the beginning of this volume ; their acquiescence in the inevitability of the curse is perhaps an instance of the lethargy remarked upon above. Some refer to the third dream of King Kawthala * which foretold a time when the young men would fail to obey the precepts of their elders ; these practically adopt the same explanation as those who blame the educational system.

The formation of the Sarawah Police Corps, afterwards called the Tharrawaddy Police Corps, in 1854 has already been mentioned in the account of the operations against Gaung Gyi. It consisted of six disciplined battalions each with two European non-commissioned officers. In addition there were police in armed boats on the Irrawaddy and the body of village and town constables under the *thugyi* assisted by *gaungs* of villages and wards and their *kyedangyis*, the myoök of each Township supervising the *thugyi*s within his charge. The battalions did fair work in their time ; in 1857 they recovered 45 per cent. of stolen property reported, and brought to trial 742 offenders of whom 445 were convicted during the year. The cost in that year of the rural police in Tharrawaddy was Rs 19,166; there were no paid police in the towns.

In 1861 the local police battalions were taken into the provincial Police Force constituted under Act V of 1861 together with many men from the Pegu Light Infantry which was then disbanded. At the same time all troops were withdrawn from the district, which relied then upon police for the maintenance of order. The village police remained much as before but much reduced in numbers. It worked in communication with the constabulary. The

Police.

* The industrious may care to read accounts of these 16 dreams which are related in most of the dream-books sold in the bazaars, e.g., Ibrahim's "Dream-book" published by the "Thuriya" Press, Rangoon ; Kumera's "Dream-book," published by the Ratanathiri Press, 24th Street, Rangoon, in 1910 has the first six dreams.

kyedangyi (literally the "largest tax-payer") was an inhabitant appointed in every hamlet by the Deputy Commissioner who was bound to report to his immediate superior, the *gaung*, all crimes occurring within his hamlet and in return for this and for assisting the *thugyi* in revenue matters was exempted from the capitation-tax. The *gaung* was a paid village constable working in close communication with the regular police post and having jurisdiction over the whole or part of a *thugyi*'s circle.* He had no fiscal or judicial powers or duties whatsoever. The average area under each *gaung* in 1861, taking the whole of Lower Burma into account, was about 80 square miles.† In the early seventies however this system became unsatisfactory; for ten years the matter was under consideration but progress was obstructed by financial difficulties. By 1875 we learn that the rural constabulary consisted of the "village headmen who never get over Rs 5 a year but are forced to exercise the most multifarious functions connected with revenue, sanitation and police."‡ "Above these were the *yazawut gaungs* who get Rs. 10 a month and do all the minor criminal work of the district. "Incidentally these remarks show that it was the village headmen who developed out of the *kyedangyi* and not, as is commonly supposed, the ten-house-*gaung*. In 1880-81 under the District cess and Rural Police Act a cess of 5 per cent.§ upon the land and certain other revenues was levied and the proceeds applied to the improvement and payment of the rural police. "As the duty and responsibility thrown upon him (the *kyedangyi*) increased it became more and more difficult to induce respectable villagers to accept the office." The pay of the village police officer or headman was now raised by Rs 29 to Rs 125 per annum. Over him was a superior rural policeman in charge of a circle. "The rural police are to act in co-operation with and in subordination to the regular constabulary but the members of the rural police will retain as far as possible their position as representative and influential villagers." But in the disorders of 1886-7 it was found that while the regular police gave little or no assistance in the detection and suppression of crime and not infrequently seemed to be

* Fryer's Manual, 1867, 161 page 140.

† Administration Report, 1861-2, page 7.

‡ Administration Report, 1875-6, page 77. See also Introduction to Report of 1880-81.

§ Five per cent. had been levied for other purposes since 1865; the total now became 10 per cent. See Fryer's Manual, 1867, page 186.

assisting the criminals, the rural police failed because they had lost touch with the people. This was more or less the case in other districts too and the Village Act of 1888 was Sir Charles Crosthwaite's remedy by which the existing system was inaugurated. The disorders of 1886-88 also led to the formation of an Indian Police force which in 1888 was brought under the Military Police Act thus establishing the present civil and military police force. Beat patrols were introduced in 1890 and were effective in preventing and suppressing crime, and in recent years police officers have accompanied every railway train to watch the movements of known criminals.

A marked feature of the district history is perhaps the frequency with which punitive police forces have been imposed. In 1886 a force of 189 men was imposed for a year at the request of the people; but next year when the monsoon was unfavourable they objected to its continuance. Since then small forces were frequently imposed; in the late nineties they were regular institutions in most of the townships; and in 1912 it was found that besides increasing the regular force by 117 men of all ranks * it was necessary to impose a punitive force of 203 men for five years at a cost of Rs. 5,43,000, which was recovered by a ten *per cent.* cess upon the land revenue. There are few other particulars of special interest in Tharrawaddy save that the general reform of the provincial police in 1906 seems to have been unfavourable to Tharrawaddy, for after that crime steadily increased. Before reorganisation the force *per head* of population was larger than in any other district; after reorganisation it was smaller than in most. Comparison with Pegu and Prome Districts is shown in the following table which states the proportional population to each officer of the classes named.

Year.	Ratio of population to		Police officers of all kinds.		To investigating officers.	
	1905	1910	1905	1910	1905	1910
Tharrawaddy	...	953	829	11,208	11,726	
Pegu	...	980	680	9,804	11,155	
Prome	...	10,97	614	8,532	8,236	

Mention may be made of the district police school at Tharrawaddy. The scheme was sanctioned before 1887

Police
School

* 111 men had been added as recently as 1904.

but, owing to delay in getting a site or suitable buildings, the school was not opened until that year. For several years after there seems to have been no difficulty in keeping the school full. In fact recruits were so readily obtained that a certain amount of selection was possible and only men of some education were taken. A change came when the police force was re-organised in April 1892. The pay was cut down to Rs. 9/11 and owing to this recruits were practically unobtainable. There were only eight recruits at the end of 1893 and the District Superintendent of Police reported that he was unable to obtain more. A number of districts, though not all, suffered similarly at this time, and it is not until 1896 that we find any signs that recruitment in Tharrawaddy had improved. In that year the District Superintendent reported that a number of promising recruits had been obtained. In those bad years the school was hampered in various other ways. The accommodation appears to have been insufficient and until 1896 there was no rifle range so that the men could not be put through their musketry course. In 1894 one reason given for failure to train the full number of men was that owing to the disturbed state of the district a large number of men had to be employed on beat patrol duty in the dry weather. This difficulty still exists; for even now, owing to the prevalence of violent crime in the district, the school is practically closed from November to June and the men sent out on patrol duty. The difficulty in obtaining recruits has not been surmounted; recruits come forward but they are not of the required stamp and as a rule they do not stay long in the force. The pay—Rs. 12 on enlistment—is said to be too low to attract the proper class of recruit. The school is in charge of a Sub-Inspector who is the Senior Instructor and is assisted by another Sub-Inspector and two Head Constables.

Jails. While the district had its headquarters at Mingyi there was a jail at that station built in 1857 at a cost of Rs. 6,614 by Captain David Brown to replace the lock-up previously in use. The system in vogue was that each district should have a small jail in which should be retained all prisoners whose sentences did not exceed three years. A wall round the jail was built by convict labour in 1859. The mortality was rather high, deaths resulting principally from dysentery of which, according to the report of 1860, the exciting causes were broken constitutions arising from previous dissipation and want. The small jail was expensive, the annual cost of each prisoner in 1860, being Rs. 103 as compared

with Rs. 67 in Henzada; and on 6th August 1861, the district having been merged in that of Myanaung, the jail was closed and all the prisoners transferred to Rangoon Central Jail. In 1896 or so there was a proposal to build a district jail at Tharrawaddy, but as it did not seem possible to overcome the difficulty of providing a proper water supply * and as the jail population of the Province generally was decreasing no effective steps were taken. A site north of the American Baptist Mission compound is still reserved however as a jail site under orders re-iterated in 1908.

Little is known of the earlier ecclesiastical history of the district. In the early days of the province riverine stations were visited quarterly by an S.P.G. clergyman residing in Rangoon, and Mingyi probably shared in these ministrations although no church was built. When the headquarters were established at Thônè a temporary building was used as a church; later a church was erected by private subscription at Tharrawaddy but there is no record of the date. The first service in this building was conducted on 7th January 1883 by the Rev. A. P. Pendleton, Railway Chaplain. In 1884 the land on which the church stands, which formed part of the Forest Department compound, was handed over to the Church Committee,† but there is no record of its consecration. In 1887 a new chancel was built. The station is now visited by the Railway Chaplain on the first Sunday in each month, but the church still relies on private subscriptions for its upkeep.

Ecclesiastical.

The land for the cemetery was marked out in 1878 immediately after locating the new headquarters; the Public Works Department completed the work there in 1880. The cemetery is administered by the Deputy Commissioner.

The history of the Municipalities and Notified Areas under Town Committees will be found in a later chapter devoted to that subject. In the rural parts of the district the District Cess Fund is applied to the purposes usual in Lower Burma districts; namely the construction and maintenance of such means of communication as are not maintained at Provincial or Imperial charge, bazaars, cattle pounds, dispensaries, and various local services, the payment of rural police and the support of education. Originally this fund was derived, as in other districts,

Local Government.

* General Administration Report, 1897-8.

† Deputy Commissioner's File No. 31 of 1884.

from a five *per cent.* tax on the Land Tax and the Fisheries and Net Taxes, and was applied *per cent.* to the heads shown in the margin in the proportions shown. Roads ... 1 Education ... 1 Dâks ... 0·5 Village Watch 2·75 In 1880, on the Rural Police and District Cesses Act coming into force, the cess was changed to ten *per cent.* on the Land Revenue, and the fund applied to various local purposes. Under the orders of towns the cost of acquiring land in those towns was met from 1878 forming railway towns funds (or the district fund if no town fund existed) to which also the rents received from that land afterwards were to be credited ; this system is still in force in certain towns.* Yegin-Mingyi had a town fund from about 1861 to which the proceeds of the sale of licenses for the retail vend of imported liquors used to be credited. There were also independent funds for the dispensaries at Mingyi and Tharrawaddy for some time †.

Section 34 of the Police Act (V of 1861), which is of the nature of a municipal regulation, was applied to Zigôn, Gyobingauk, Ôkpo, Minhla, Letpadan and Thônzè in 1878;‡ it now applies also to Tharrawaddy, Sitkwin, Othégôn and Nattalin.

Excise and Opium.

The importance of excise and opium as a source of revenue in the district may be gauged from the fact that over one-sixth of the total revenue falls under this head. The total revenue collections of the district average about 23 lakhs of rupees while the average nett revenue from Excise and opium in the last decade has been $3\frac{3}{4}$ lakhs. There has been an enormous increase in the revenue under this head in the last thirty years. The average annual nett revenue for the decade 1885-1895 was only Rs. 55,720 ; the average for the next decade was Rs. 2,21,615 ; that for the last decade, 1905-15, was Rs. 3,75,841. The revenue in 1886-7 was only Rs. 23,532 but the figures rose more or less steadily until the last year of the decade when the sum of Rs. 82,755 was reached. There was a decrease of over Rs. 6,000 in the following year but in 1896-7 the nett revenue was Rs. 1,16,020, and from that year onwards the

* Chief Commissioner's resolution No. 3TL., dated the 31st March 1881. The towns are mentioned in Town and Village Lands Direction No. 47 which is the outcome of this old practice.

† See the section on Hospitals in Chapter XIII.

‡ Judicial Department Notification No. 104, dated the 15th August 1878.

figures rose steadily till the record year 1905-06 was reached when the nett revenue totalled Rs. 5,42,851. From that year there was a rapid decline till in 1910-11 the low water mark for this decade was reached, the revenue being Rs. 2,93,497 in that year. Since then there has been a steady increase and in 1914-15 the nett revenue was Rs. 4,17,387. It should be remembered that these figures represent nett revenue while the 23 lakhs mentioned above as the total revenue collections of the district are gross receipts.

Those who regard the British Government as responsible for the opium evil in Burma might be interested to find that in 1853, the first year of occupation of the Province, when Gaung Gyi's rebellion was at its height and the Sarawah people were driven to Henzada and suffered there from great poverty, the Deputy Commissioner reported: "Intoxicating drugs are used to excess by the idlers—chiefly opium sold secretly by Chinamen." The *tari* palm abounds in the district especially in the north and it is probable that the drinking habit also was well established before the British occupation. In Upper Burma under the Burmese kings drinking was prohibited by law but was winked at, and there is no reason to believe that the position was any better in Tharrawaddy before 1853. Another indigenous form of liquor is *seinya* or country beer made from rice. At present this is said to be manufactured in nearly every village in the remote parts of the district. For opium and spirits alike the policy adopted after the British occupation was to endeavour by the imposition of a high rate of duty to diminish the quantity accessible to the people to an amount consistent with the enjoyment of health and the due exercise of the mental faculties*. Licenses for the sale of opium or of liquor were issued only in towns where European officers were stationed.† In 1866 complete rules were issued instituting the farming system,‡ which continued until it was replaced under Act X of 1871 by the fixed duty system by which they were charged a fixed duty on the spirit or drugs actually passing into consumption, and a license fee for the right to open a shop for the retail vend of the duty paid article. A monthly tax was charged on distilleries in remote parts.

The
Policy of
Govern-
ment.

* Administration Report, 1858.

† Administration Report, 1860.

‡ For details, see Fryer's Handbook, 1867, page 298. In 1871 it was directed as a measure against illicit opium that the opium farmer must take a certain quantity of confiscated opium.

Opium.

In 1856-7 there was no gunja or opium revenue in Tharrawaddy. Under the 1871 rules an opium shop was opened at Yegin-Mingyi with a license fee of Rs. 5,000, the licensee being supplied with Government opium at Rs. 30 per ball of two seers. In 1875-6 the license fee realised was Rs. 4,630. This shop was closed soon after, and there was no opium shop in the district until 1896 when one was opened at Letpadan. Owing to the spread of the opium habit and to the need for some sort of restriction on the sale of the drug to Burmans opium consumers' tickets were issued in 1894. Only men over 25 years of age were allowed to register their names and possess opium. A further registration was necessary in 1898 as numbers had come forward asking to be registered and another in 1902-03. In 1896 the Letpadan shop license was auctioned and sold for Rs. 39,500 and in 1898 for Rs. 58,700. The amount of opium to be sold was 12 maunds, an amount calculated on the basis of the estimated number of consumers in the district. The method of auctioning however was found to be unsatisfactory as the licensee had to participate in illicit trafficking in opium in order to pay his fee and the method was accordingly abolished in 1901. In 1902 two more shops were opened, at Gyobingauk and Monyo. The license fee for all three shops was Rs. 1,000 and the amount of opium to be sold was 25 maunds in Letpadan, 18 at Gyobingauk and 7 at Monyo. In 1903 another shop was opened at Tapun, the license fee being Rs. 1,000 and the amount of opium to be sold 13 maunds. A Resident Excise Officer was posted to each shop as it was opened. The sale of opium gradually increased and at present the annual sales for the district amount to about 73 maunds. The number of consumers especially Chinese has more than doubled since the opening of the shops in the district, but owing to the restrictions on sales and the better regulation of daily allowances the increase in the amount of opium sold is slight. The amount of revenue derived from the sale of opium each year can be ascertained from the figures in the B Volume of this Gazetteer. The highest figure reached was in 1905-06 when the gross revenue amounted to Rs. 4,61,353 but there was a steady fall until 1910-11 when less than half this amount was realized. Since then there has been a slight increase, the figures for 1914-15 being Rs. 2,54,386, which was about Rs. 5,000 less than the previous year. When the shops were first opened the price of raw opium to the licensee was Rs. 60 per seer.

and it was retailed at Rs. 80. In 1913-14 the price to the licensee was raised to Rs. 90 and the retail price to Rs. 100. The opium habit does not appear to be spreading in the district.

Spirit licenses were sold in 1872-3 for Rs. 1,000 each at Tapun, Mingyi and Monyo and for Rs. 2,000 at Sanywe ; and toddy licenses at Yegin and Tapun at Rs. 1,400 and Rs. 300 respectively. Toddy-shops had existed also at Sanywe, Monyo and Kunhnaywa in 1868, but these had been closed in the meantime. There was a distillery at Henzada where the duty was Rs. 2.5 per L.P. gallon, the spirit being made after native methods. In 1875-6 the licenses in the Tharrawaddy Subdivision for the retail vend of country spirit yielded Rs. 2,750 revenue, while outstills paid Rs. 1,020 and *tari* Rs. 5,056 ; in addition the imported liquor license at Yegin yielded Rs. 400 and the hotel license at the same place Rs. 410, the proceeds of these licenses being credited to the Yegin town fund. The consumption of *tari* was rather encouraged in those days as it was regarded as "a wholesome beverage" * which might keep down the consumption of more deleterious preparations. In 1898 there were 8 shops for the retail vend of foreign liquor, 14 shops for country fermented liquor and 32 shops for *tari* in the district, and the amount realised in license fees for these shops was Rs. 78,975. In 1908-9 the number of shops had been reduced by 14 (all *tari* licenses) but the value of the license fees rose to Rs. 1,63,220. A higher figure had been reached in 1905-06 and even this has been surpassed in 1913-14 and 1914-15 when the amounts realized were Rs. 1,94,409 and Rs. 2,24,297 respectively.

Cocaine, which was subjected to the excise law in 1904, spread quite soon to this district on account of the railway communication with Rangoon. A great deal of the cocaine seized is in transit to other parts but it is to be feared that the cocaine habit has taken hold of a considerable number of the people in the belt occupying ten miles or so on each side of the railway line. In 1910-11 no less than 73,467 grains of cocaine were seized in one year ; the average annual seizures are about 225 ozs. and the habit is still spreading.

Gunga has been forbidden since 1872 but some illicit trade goes on. It is said to be indigenous in the Yoma. At first it was collected only for use as a medicine for the

* Administration Report, 1880.

elephants working in the teak forests, but the Karens, finding that there is a market for it, have taken to cultivating it in outlying parts of the Yoma. It is brought down in baskets and sold to Indians who come up to Gyobingauk, Zigôn and Nattalion to get it. The gunja habit has not been acquired by the Burman. Raids are made yearly by the Excise staff and plantations of about an acre each have been found.

Establish- ment.

In the early days the Excise staff of the Henzada District consisted of an Excise officer and two peons. An Excise establishment for Tharrawaddy District, consisting of an Inspector and two Sergeants, was first sanctioned in November 1884, but was abolished in 1888. In 1896 a temporary staff consisting of a Superintendent and two peons was entertained to operate in the Prome and Tharrawaddy districts. The insufficiency of the excise staff was pointed out and in 1902 the establishment was increased by one Superintendent, one Inspector and five Sergeants ; in 1912 it was further increased by one Inspector and two Sub-Inspectors. The Excise establishment was under the control of the District Superintendent of Police until 1909 when it was placed in direct subordination to the Deputy Commissioner. The establishment has no duties in connection with salt as that substance cannot be manufactured in the district.

CHAPTER IX.

REVENUE ADMINISTRATION.

Revenue system in Sarawah.

The two administrative units of Sarawah and Tharrawaddy in Burmese times had separate revenue systems. In Sarawah the revenue was held in gift by the royal foster-mother Mè Ywe and the resident official was Steersman Maung Shwe Zan who lived at Sarawah. The revenue consisted of 22·50 viss * of silver for the maintenance of 75 men, the strength of the boat contingent, and ten viss for Mè Ywe. Gifts were also made of wax and honey to the officials at the capital. The revenue was received from various sources such as house assessment averaging five ticals per house, and five or six ticals from each garden ; from 25 to 30 baskets of the rice paid in kind for each yoke of buffaloes kept, the rent of fisheries which came to above six viss and fees for river fisheries one and half viss. An item

* One viss was worth approximately Rs. 130.

of 150 *ticals* "brokerage" is also recorded but is not understood. The brokerage fees for river fisheries and rents of fisheries as well as the judicial fees amounting to seven or eight *viss*, were the perquisites of the resident office bearer. The actual figures of the collections of 1851-2 (B.E. 1213) were house and garden tax 16·25 *viss*, buffalo tax 17·43 *viss*, fishery rent 6·25 *viss* of silver. No forest revenue is recorded.

In Tharrawaddy principality the revenue properly was 630 *viss* of silver but actually it fluctuated between that amount and 1,200 *viss*. In B.E. 1213 the house tax yielded 200 *viss* of silver, the fisheries *nil*, the buffalo tax in paddy lands 200 *viss*, royal forests 100, timber duties 40, transit duties 5, capitation-tax on Karens and Shans 150; total 695 *viss*. In addition 365 lbs. of honey, 365 lbs. of bees-wax and 100 mats were sent in annually.

When the province of Pegu was annexed it was brought under one uniform revenue system. The chief sources of revenue became the land-tax, capitation-tax, forest, excise and fishery revenue; besides sea-customs and export duties which did not concern Tharrawaddy directly. For the first year the land tax was levied on each yoke of cattle according to the Burmese custom as measurements of the land could not be completed in time. But from 1854 the tax was levied at fixed moderate acre rates settled by the Deputy Commissioner and Commissioner on land under cultivation, measurements being made by the *thugyi* under the superintendence of the *gaung-gyôk** and tested occasionally by the Deputy Commissioner and his Assistant. A tax ticket signed by the Deputy Commissioner or the Assistant Commissioner was to be presented to every tax-payer before payment was demanded. The other principal tax was the capitation tax of which an account is given in the next article. Both the land-tax and the capitation tax were collected in towns by the *gaungs* under the immediate supervision of the Deputy Commissioner; in other places by the *thugyi* who made over the collections to the *Gaung-gyôk* for transmission to the Treasury.

To assess the land-tax enquiries were made as to the capabilities of the soil, but in the disturbed state of the district very little information was obtained. From experience in Arakan and Tenasserim a maximum rate of Rs. 2 per acre had been fixed for the districts of Rangoon and

Revenue
in Thar-
rawaddy
under
Burmese
Rule.

Early
years of
British
occupa-
tion.

Rates of
Assess-
ment.

* Chief Secretary's File No. 1 of 1853.

Bassein which had fertile soil and the greatest facilities for the disposal of the produce ; rates varying from eight annas to Re. 1 were accordingly imposed in remote districts like Sarawah. As no *thugyi* knew what an acre was when he made the reports on which the rates were based or when he calculated the assessments, these latter were very much a matter of chance. But the rates thus fixed continued in force until 1858 when on account of the general extension of the rice cultivation in the province consequent on the demand for rice for export, a systematic revision of the whole land assessment of the province was begun.

Acre rates
fixed by
kwins.

The assessments of 1854 were made at fixed rates uniform over circles which averaged about 20 or 30 square miles. In 1858-9 the new system was introduced by which acre rates were fixed for tracts called *quengs* (now spelled " *kwins* ") which were to be about 300 to 500 acres in area. The beginning was made in Rangoon district but in 1862-3 the Myanaung District was reached and the Tharrawaddy Subdivision appears to have been taken up in 1863-4. The Settlement Officers fixed for each *kwin* an acre rate which was determined according to the circumstances of the case having regard to—

- (1) the current rate *per acre*,
- (2) the average yield of paddy,
- (3) the local price of produce,
- (4) the distance of the market and the facilities for conveying the produce thereto.

The rates imposed in Tharrawaddy varied from one to two rupees per acre ; the highest in the province being Rs. 5 in Amherst and the lowest four annas in some parts of Myanaung which was then described as the most populous district, but poor. The rates for gardens, orchards and miscellaneous cultivation continued to be the highest rates fixed for paddy land in the circle. Fruit trees were to be included in land assessed at acre rates if possible ; otherwise they were to be assessed at four annas per tree from the time of first bearing fruit.

The lease
system.

But from 1858-9 the lease system had been growing up. At first this was a system of leasing all the land in a village tract to all the cultivators therein jointly ; but this was soon found to be unpopular, and by the time the Settlement Officers reached Tharrawaddy the individual lease system had been adopted. Under this system any cultivator who desired it might have a lease under which he would be assessed at the *kwin* rate fixed by the Settlement Officer according to the area of his land entered in the land-tax

rolls for previous years, or, if he preferred it, the land would be re-measured for the purpose. During tenure of the lease cultivation might be extended into waste land near by without increase of revenue. Cultivators who took leases for periods exceeding four years had the option of surrendering their land. Land left fallow in the course of husbandry was assessed at two annas per acre. Special remissions were granted in cases of :—

- (1) murrain amongst the cattle,
- (2) floods,
- (3) any other real losses.

On expiry the leases were renewable, the addition to the rent on account of new land being limited to one-half the rates imposed upon the land under settlement in the first instance.

No figures are available for the Tharrawaddy subdivision, but it is recorded that in 1863-4 when 57,029 acres were settled in Myanaung District the owners of 55,649 acres accepted leases, generally for ten years. Most of this area must have been in Tharrawaddy as the Settlement Officers worked there in that year. In 1868 the Deputy Commissioner reported for Myanaung District that the leases were very popular, that lessees would readily renew their leases on expiry on the same terms for ten years or even longer, while cultivators in unsettled circles wanted to have leases too on the same terms. In 1869 a new settlement establishment was formed under Captain Fitzroy who reported that the cultivators in Rangoon District were unwilling to renew their leases, and considered that the settlement system had caused a loss of revenue and had checked the increase of cultivation. But the lease system was always less popular in the lower delta than it was higher up. Captain Fitzroy's alternative scheme was rejected and the old system continued after some revision. The main duty of the settlement party now became demarcation and survey. The Deputy Commissioner subject to the Commissioner's approval would fix rates for each *kwin*, but if widely differing degrees of fertility existed in the *kwin* he might subdivide the *kwin* and impose discriminative rates for the various portions. Lessees might abandon land on one year's notice. Fallow would be allowed for as before up to a limit of one-fourth of the holding. Leases were to be for five years or ten years, a uniform term being adopted in each *kwin*. Under these conditions leases were issued in the Myanaung District at rates up to three rupees per acre, but no higher.

rate than two rupees was reached in the Tharrawaddy subdivision. Meanwhile the rules of the 29th August 1865 had imposed a cess of 5 per cent. upon land and fishery taxes.*

In 1871 were abrogated the waste Land Grant Rules of 1863. No grants under these or under the earlier rules of 1855 were ever issued in Tharrawaddy.

Extension of cultivation. In 1871-2 there were severe floods in the Hlaing valley, as indeed there had been for two or three years in succession, steadily increasing in intensity. But in spite of this, cultivation was rapidly extending, miscellaneous crops being raised in a great part of the area. After the payment of the revenue of 1873-4 the ten years leases expired over the whole of Tharrawaddy. On account of the rapid extension of cultivation that was going on, and as there was a paucity of officers available for settlement work and a great demand for their services in Rangoon and Bassein Districts, it was decided not to release these lands at once. There is no record of any discussion concerning the renewal clauses of the leases at this time. As a first step to the annual assessment certificated surveyors were sent out by the Deputy Commissioner to measure the land under the *thugyi's* orders] "with very satisfactory results"; the complaints made against the measurements were exceedingly few. The increase found to have taken place in the decade was as follows† :—

—	Acres. cultivated	Revenue Rs.
1864-5 	64,367	99,320
1874-5 	101,021	149,270
<i>Per cent. increase</i>	56·95	50·25

Increase in rates of assessment.

The year 1874 was a famine year in Bengal and rice sold in Burma at double the usual rates. In 1877-8 the Rangoon closing price was Rs. 150 per 100 bushels (eight gallons); towards the end of April 1878 it fell to Rs. 120 and after rising in June to Rs. 135 fell again in July with a

* See Fryer's Manual, 1867. One per cent. each was assigned to roads and education, one-quarter per cent. to district *dak*, the remainder to "village watchmen." See the section on Local Funds.

† Administration Report, 1874-5.

small demand to Rs. 107. In 1879 the January price was Rs. 85 rising in February to Rs. 105. But the real prices were ten *per cent.* higher than these because competition had led to short measurements by the millers. The measures were nominally the English bushel but their capacity was diminished by fixing in the bottom one or two pieces of wood each an inch in thickness, or by marking the measure with chalk one inch or more from the top; or the grain was scooped off the top of the level bushel once, twice or even thrice. Coupled with these high prices there was the improvement of communications reducing the cost of marketing the grain; and it was observed that the rates of land revenue represented little more than a nominal portion of the crop. A summary enhancement of the rates fixed in 1863-4 by 25 *per cent.* all round was therefore ordered in 1878 in Tharrawaddy as well as in the other favourably situated districts of Rangoon, Bassein and Thongwa, to take effect from the 1st April 1879. It was mentioned in supporting this proposal that in some of the railway towns of Tharrawaddy Rs. 4 *per acre* was being paid. No difficulty was experienced in realising the enhanced revenue. But as we learn from the Settlement Report of 1880-81 that the actual increase in the Thonzé circle was four annas *per acre* it appears that a mistake was made in carrying out these orders in Tharrawaddy.* In 1878 it was also decided that a regular settlement should be undertaken and in the meantime no new leases should issue; the system of annual measurements was to be temporarily in force everywhere. In 1880 the Rural Police Act came into force by which in order to pay for the new rural police the 5 *per cent.* cess which had been levied since 1865 for local purposes was increased to ten *per cent.* thus causing another increase in the cultivator's taxes. Cultivation however still extended; the area of paddy land assessed in 1878-79 was 149,372 acres and in 1880-81 this had risen to 162,012 acres.

In 1879-81 there was a discussion as to the remission to be granted on destruction of crops which was of special importance in Tharrawaddy District on account of its liability to floods. Originally the remission of land revenue in this case was proportional to the share of the crop destroyed; no account was taken of any surplus in previous bumper years from which the cultivator might have been

Remission
in cases
of destruc-
tion
of crops.

* A rate of 25 *per cent.* was often spoken of in those days as a four anna rate. Compare the system of reporting crops in district summaries still in force. The mistake probably arose in this way.

able to meet the loss. In February 1879 the rules under the new Land and Revenue Act (1876) were issued ; these did not provide for remissions on the same lines as before. Rules 93—95 directed the officer who inspected the crops to report in each case the extent to which he considered relief should be granted, the Commissioner passing such reasonable orders thereon as the circumstances demanded. Subsequent orders directed that the ability of the land-owner to pay and the large profits of previous years should be taken into consideration in assessing the relief. Care was enjoined to prevent the revenue demand from pressing hardly upon the cultivator, but it was held "not to be a matter of course that cultivators whose crops might be more or less injured should obtain remission." The matter was reconsidered in 1880-81 and the Government of India approved of the Chief Commissioner's decision that the new rules should be retained as they stood but special instructions issued to the effect that the general rule should be that if more than one-third of the crop was destroyed remission should be granted and should be proportioned to the actual loss of crop, and that special remissions might be given in special cases. The parallel discussion arising from the proposal to allow for fallows by an all-round reduction of revenue rates and abolition of the fallow-rate did not concern Tharrawaddy very closely since in the first settlement report of 1880-81 the Settlement Officer stated that as no fallow land properly so called existed he had made no drawback on that account in his proposed rates, and in 1882 the two-anna rate was reintroduced into the rules.

**First
Regular
Settle-
ment.**

The settlement just referred to was made by Sir Harvey Adamson and was the first regular settlement of the Tharrawaddy District, and the first regular settlement in a district in which transplanting of the rice plants was practised. The central plain of the district was settled, beginning at the south in 1880 and being completed at the north in 1884 when the settlement party moved into Prome. In 1880-81 in the Thônzé circle the Settlement Officer assumed a local price of Rs. 54 with cost of carriage Rs. 7·9 by boat and Rs. 13·8 by rail; the opening price of paddy in Rangoon in February 1882 however was Rs. 65 being the lowest known in February since 1876. The proposed rates were therefore reduced to Rs. 2, Rs. 1·75 and Rs. 1·50 in the tract which included the greater part of the area. This tract had a third soil class consisting of flooded land and two other classes. The soil classification was not very

minute ; it followed the previous system of subdividing *kwins* only when internal differences were large. A small tract of new land was formed on the extreme east near the hills and a one rupee rate was imposed there. The higher rates were calculated by taking one-half of the estimated net profits as representing the revenue *plus* the ten *per cent.* cess,* which yielded rates of Rs. 3-3-0 and Rs. 2 ; but lower rates were imposed as related above. The rates previous to settlement were Rs. 1-00 to Rs. 2-25.

Next year the tract adjoining on the north was settled and Rs. 2-25 sanctioned as the maximum rate with a reduction to Rs. 2 until further orders which were to be issued when the course of the paddy market became more apparent. In 1882-3 the settlement of the surveyed area of the district was completed and for this northern portion rates of Rs. 1-50 to Rs. 2 were imposed. A small additional area consisting of jungle *kwins* mainly in the east of the district was settled in 1883-4 on similar lines.

Throughout the district the rate for gardens, which were generally large house plots in villages, was Rs. 2-4 *per acre* in the south, Rs. 2 in the north, for miscellaneous cultivation Re. 1 in the *kwins* settled in 1883-4, and the same as for gardens elsewhere. In 1884-5 the rate on tobacco was reduced to Re. 1† all over in order to encourage the cultivation of this product, and notices announcing this were issued to cultivators.

In 1899 a summary enhancement of two or four annas *per acre* was made in the rates for paddy land over the area settled in 1880-83. In 1900-02 the central plain was re-settled by Mr. E. A. Moore and rates for paddy were raised to from Re. 1 to Rs. 3-25 ; gardens and miscellaneous cultivation were assessed at Rs. 2-50, sugar-cane at Rs. 4, solitary fruit trees at four annas *per tree*. Except in the flooded area in the west where silting of the Myitmaka basin had been proceeding there was not much reclassification. In 1903-4 a few *kwins* of the Monyo township and the part of Letpadan township lying near the Irrawaddy were settled by Messrs. MacKenna and Webb.

Other
Settle-
ments.

* Government made no remark upon the cess being deducted from the one-tenth share in calculating the revenue ; but the Settlement Commissioner of 1907 condemns the process in the Settlement Manual. The rates are approximately equal to one-tenth gross produce.

† Administration Report, 1884-5. But from the reports of Revision Settlement in Tharrawaddy in 1900-02 it appears probable that no reduction was made in this district.

This area consisted of a strip of land, mainly inundated, along the East bank of the Irrawaddy and one isolated *kwin* in the east of the district. In the riverine tract the incidence of assessment prior to settlement had been Rs. 1·8 per acre, but the new rates proposed by the Settlement Conference were from Rs. 2·75 to Rs. 3·25 for first class land and from Rs. 1·25 to Rs. 2·25 for second class. *Mayin* was assessed at Rs. 1·4 per acre and gardens and miscellaneous cultivation at Rs. 1·12. In the isolated *kwin* the rates for paddy were Rs. 1·75 and Rs. 1·00 and for garden and miscellaneous cultivation Rs. 2. Solitary fruit trees were assessed at four annas per tree.

Revenue Statistics.

Volume B of this Gazetteer contains statistics of the revenue of recent years. It is interesting to compare with these the figures for the early years of the district accordingly a statement of the revenue in 1887-8 in the Tharrawaddy District (which did not then include Thônzè circle)

1857-8.	Tharrawaddy.	Province of Pegu.
Area (square miles).	1,950	32,250
Population Townships	103,208 7	840,203 65
<i>Revenue Collections.</i>		
Land Revenue.	98,974	12,59,915
Capitation tax.	91,749	8,57,364
Fishery ...	14,315	3,33,675
Excise and Opium.	3,335	3,25,333
Timber ...	330	
Other Forest Produce	54	
Bazaar collections.	412	13,73,983
Fines and Fees.	6,961	
Other sources	1,101	
Total Revenue.	2,17,931	41,50,270

is given in the margin with figures for the whole province of Pegu for the same year for comparison.

In the same year the cost of administration in Tharrawaddy excluding cost of the Forest and Imperial Departments and of the Pegu Light Infantry was Rs. 1,35,985. The figures shown for timber are the receipts on account of trees sold locally for felling, and take no account of royalties levied at timber stations on the rivers. The bazaar was at Mingyi. In 1875-6 when the area of the Tharrawaddy subdivision was 2,214 square miles and the population 225,381, the total

revenue was Rs. 5,13,320; no forest revenue is included except Rs. 292 tax upon bees-wax.

In Burmese times there was a capitation tax upon Karens and Shans in the Tharrawaddy principality and both there and in Sarawah a house tax was imposed upon Burmans too. In the first fiscal scheme * of the province prepared by the Government of India for execution by Captain Phayre a capitation-tax of Rs. 4 upon married men and Rs. 2 upon bachelors and widowers (with much the same exemptions as are now in force) was included. But there is a pathetic report by the Deputy Commissioner engaged at that time in dealing with Gaung Gyi's army of nearly 2,000 men that he was unable to do much in the way of capitation-tax collection in 1853†. In December 1854 and the next two months however the tax was duly collected and in 1857-8 the collections amounted to Rs. 91,749. In the original orders there is no discrimination of rates between Burmans and others, but in 1854 on receiving charge of the district Captain David Brown found that Karens paid only half rates, namely Re. 1 for single and Rs. 2 for married men; these rates continued in Karen villages up to 1906. In the early years in connection with this tax an annual census of the whole province was carried out in August. In 1861-2 in consideration of the license and tobacco taxes not being imposed and also on account of the income tax not being extended beyond the chief towns, the general rates were raised to Rs. 5 and Rs. 2·50. It was considered that the Rs. 5 could be paid more easily than had been Rs. 4 when the latter rate was imposed in 1853. These rates were the same as those in all other districts, there was no such gradual increase of the tax as has been reported elsewhere ‡. In 1879 § orders under the Land and Revenue Act continued the tax at the existing rates. In 1906 the rates in most Karen villages were raised to the Burman rates, in some to Rs. 3 and Rs. 1·50 while in a few hill villages the old rates of Rs. 2 and Re. 1 were retained ||. In 1910 rates were again modified so that now 36 villages pay Rs. 3 and Rs. 1·50 and everywhere else the Burman rates of Rs. 5 and Rs. 2·50

* The letter is in the Chief Secretary's File No. 1 of 1853 and bears the date 3rd December 1852.

† He also reported that the Burmese Government had made revenue collections in 1852-3 in excess of the regular revenue.

‡ For instance the Insein District Gazetteer, Volume A, paragraph 142.

§ Revenue Department Notification No. 11 of 1st February 1879.

|| Revenue Department Notification No. 551 of 15th October 1906.

prevail *. The tax continued to be collected by the same persons as the land revenue, as was arranged in 1852 ; and there has never been any special difficulty in collection in Tharrawaddy save in certain flooded areas after 1905-6 in which year remissions of capitation-tax were made on account of the losses of crops by floods. In 1910-11 however payment was enforced in spite of the floods and there has been no difficulty since.

**Income
Tax.**

The income-tax was first imposed in Pegu Province under Act XXXII of 1860 taking effect on the 1st August 1860, but only in large towns. Excluding deductions from pay of officers in the Army, Public Works and Electric Telegraphs Departments, the collections in the Tharrawaddy District for the nine months ending 30th April 1861 were Rs. 1,874. In 1862 the limit of exempted income was raised from Rs. 200 to Rs. 500 *per annum*. There is no record of any substitution of a License-tax or a Professions and Trades-tax in this district as was done in Hanthawaddy about 1866 ; the income-tax seems to have gone on continuously. In 1870 the rate was raised to three and one-eighth *per cent.* (half an anna *per rupee*) ; but it dropped in the next year to one *per cent.* the exemption limit being raised from Rs. 500 to Rs. 750. In 1872-3 the limit was raised again to Rs. 1,000 and in 1873-4 the tax was abolished. In 1890-91, it was revived under the present Income Tax Act in this district and enforced in the railway towns. It was not enforced before because of the disorder and poverty prevailing in 1888-89 †. It came into general operation on the 1st April 1905 as in all Lower Burma districts. Statistics of recent collections are given in the B Volume of this Gazetteer.

**Town
Lands.**

The first step in the differentiation of town lands in Tharrawaddy District was the proposal of Mr. de Courcy Ireland, the Deputy Commissioner of Hengzada, in 1875 to take up 40 acres of land at each of the proposed railway stations for godowns and perhaps mills as well as for houses. There was much discussion until 1878 when Zigón, Minhla, Okpo, Letpadan and "Kunhnaywa or Gyobingauk" were declared to be railway towns ; the description of the last mentioned town applies to the town now known as Gyobingauk. In each case the town consisted of a circle having

* Revenue Department Notification No. 51, dated 6th July 1910.

† Commissioner of Pegu's letter No 3312—55-14, dated 30th August 1888, printed in Supplement to *Burma Gazette*, 1888, page 819.

a radius of two miles around the railway station. The centre of the circle does not seem to have been more definitely defined but the station offices were of course quite small buildings in those days. Within the town so defined private persons were prohibited from building except under the leases about to be described. Existing buildings of a temporary nature were ordered to be destroyed ; those of a permanent nature were registered after the site had been demarcated to show existing occupancy. A rent of one pie per square foot on building areas was to be paid on registered sites until they were acquired by Government. At the same time the Deputy Commissioner was directed to mark out roads and sites and to acquire land held by private persons in blocks to be taken up from time to time as the demand for sites required. The unit site was to measure 50 feet by 100 feet ; but the Deputy Commissioner might subdivide sites, or combine them for erecting godowns, mills and similar buildings. Leases were proposed by Colonel Horace Browne, the Commissioner of Pegu who formulated the rules, to issue for ten years to be renewable on expiry at a rent to be fixed by the Deputy Commissioner but limited by a maximum increase of 50 per cent. The Chief Commissioner modified this on the ground that legislation was about to be taken for railway towns, so that he desired to issue only three-year leases for houses and five-year for godowns. Leases in the first place were sold by auction, bids being in terms of monthly rents with an upset price of about Rs. 3 * per acre, or six annas for an ordinary lot. After ten contiguous lots had been disposed of, the next five were to be reserved for a period of at least five years. Leases and transfers of them were to be registered. The payment of rent exempted the land from municipal land rates if such should be imposed, and the rents were to be credited to local funds †. The Deputy Commissioner might require lessees to furnish plans of buildings projected ; and might prohibit any buildings he considered objectionable. He might also make orders with reference to the material and description of buildings, sanitary matters in general and precautions against fire. Buildings near the railway were to have roofs of incombustible material. It was promised that if Government required the land for a public purpose it might decline to renew an

* In the Administration Report of 1879-80 it is noticed that in some railway towns of Tharrawaddy as much as Rs. 4 per acre was being paid.

† Commissioner of Pegu's File No. 11G. of 1878.

expiring lease on paying the lessee compensation for improvements.

Plans of the land to be acquired under these rules were prepared *. It was found that at Thonzè, where orders prohibiting further building had been issued two years before the operations of speculators had already placed a fictitious value on the land. Thonzè was added to the list of towns, but it was decided to avoid the expense of acquisition by interfering as little as possible with existing houses.

Land taken up near Railway Stations.

Some land in Okpo and in Letpadan had been taken up for town lands purposes in March 1887. Under Revenue Department (Land Acquisition) Notification No. 25 of the 7th March 1878, more land was acquired to form building sites at the railway stations of Zigon, Letpadan and Thonzè. At Zigon was now acquired a piece of land 3,600 feet by 1,200 feet bounded on the north by a small pagoda, on the east and south by the Minbu *chaung* and on the west by the railway; at Letpadan a plot 1,700 feet by 1,500 feet east of the railway; at Thonzè a block 900 feet by 700 feet east of railway, north of that a block 2,900 feet by 260 feet extending along the east side of Shanzu village, and again a block 250 feet by 150 feet west of the last. Shortly afterwards in Thonzè a plot 1,930 feet by 770 feet south of Roman Catholic Mission was added, † and shortly afterwards again small areas were added ‡. In Letpadan in the same year was also added a block on the west side of the railway; another block of 57 acres was proposed to be added to complete the square but no record of its acquisition has been traced. Notification No. 24 of the 7th March 1878, authorised the acquisition of a plot at Gyobingauk extending 1,500 feet on each side of the railway and bounded on the north by the northern boundary of the ("Kuhni-tywa") railway station and on the south by a line 1,200 feet south of the level crossing of the railway station. The portion 500 feet square occupied by the Public Works Bungalow had already been taken up. The land acquired in Okpo in 1878 measured 510 by 1,700 feet approximately, and was bounded on the north by the land taken up in 1877, on the south by a line perpendicular to the railway

* Chief Commissioner's letter No. 410-188, dated 7th March 1878, and No. 546-3R.-2, dated the 31st May 1892, to the Commissioner of Pegu. See also Town and Village Lands Direction No. 47.

† Notification No. 86 of 9th August 1878.

‡ Notifications Nos. 103 of 3rd October 1878 and 129 of the 12th December 1878.

and meeting it 1,700 feet south of the level crossing at the north of the station, on the east by the land acquired for the present Rangoon-Prome road, on the west by a line parallel to the railway and distant 500 feet from the western boundary.

The Civil Station of Tharrawaddy began in the acquisition of land under Revenue Department (Land Acquisition) Notification No. 33, dated the 25th March 1879, which notified a piece of land bounded on the west by the railway line and on the east by a straight line 5,500 feet distant; the northern and southern boundaries were somewhat irregular; the length along the railway was 3,030 feet. But the formal declaration of a Civil Station under Rule 61 under the Town and Village Lands Act of 1898 was only made on the 1st June 1910* when its area was 258 acres.

In 1881 the sites leased in the railway towns were exempted from assessment to land revenue for a period not exceeding thirty years from the date of issue of the lease provided a house actually stood upon the site.†

In 1908 the town lands leases were checked and as usual in all Burma towns at that time many cases of breach of lease conditions were found. These were of the usual nature—failure to build any house at all, or the erection of a house inferior to that promised, erection of stables, cow-sheds, etc., on sites leased for houses, unauthorised sub-letting, unauthorised occupation, unregistered transfers. Penalties of fines or enhanced rents were imposed; but it was decided then to ignore the sanitary conditions of the leases in future, leaving such matters to be regulated by Municipal bye-laws.

In 1910 and 1911 the system of supplementary survey was introduced into the towns of —

Nattalin	Othègôn	Tharrawaddy
Zigôn	Minhla	Thônzè
Gyobingauk	Sitkwin	Inywa
Ôkpo	Letpadan	Zibugôn

Civil
Station a
Tharra-
waddy.

Breach
of Lease
Condi-
tions.

Supple-
mentary
Survey in
Towns.

and subsequently into the towns of Tapun and Gamônzeik. Of these towns Gyobingauk, Letpadan and Thônze come under the Town and Village Lands Act as municipalities; the others were specially notified under that Act.‡

* Financial Commissioner's Notification No. 89 of 1st June 1910.

† Revenue Department Notifications No. 75 of 8th September 1881 and No. 206 of the 26th May 1896.

‡ Gamônzeik in Revenue Department Notification No. 94, dated 27th November 1911, all the others in Revenue Department Notification No. 100, dated 29th December 1908.

Surveys.

When the *kwin* system of assessment was brought into force permanent demarcation was made only of *kwin* boundaries and of a few village sites. In 1880 the Burma Boundaries Act (V of 1880) came into force and action under it was taken in Tharrawaddy in February of that year, some 2,528 square miles being demarcated in the central rice plain before the end of the year. Demarcation included clearing and marking with posts the boundaries of *kwins*, village sites and grazing grounds, and the preparation of rough sketch maps for the guidance of the surveyor. The cost of demarcating the first 1,314 square miles was Rs. 380 only. Boundary surveys were made of over 70 square miles in the early part of 1880. In 1880-81 cadastral survey under Mr. Talbot at sixteen inches to the mile was carried out in 461 square miles; the average size of the cultivated field was 0·46 acres. In 1881-2 the 16-inch survey in Tharrawaddy was completed and 107 square miles surveyed on the 2-inch scale. In the same year supplementary survey was introduced in the Thônzè circle and by 1883-4 the system was in complete working order. The area under survey in 1884-5 was 814 square miles which increased by 1888-9 to 1,096 square miles. The surveyors at first were kept at headquarters with the Superintendent of the survey operations as they are not thought to be sufficiently experienced to be sent out to the *thugyi*'s headquarters; they were sent out in 1885-6.

Grazing grounds.

Meanwhile in 1878 a number of grazing grounds had been allotted by Captain Forbes. The Settlement Officer reserved more in 1880-84. In 1883-4 of 163 grazing grounds proposed 94 were sanctioned and demarcated.

Trigonometrical survey.

The District of Tharrawaddy is traversed by the Eastern Frontier (Burma Coast) Series of the Great Trigonometrical Survey of India which was observed between the years 1864 and 1882. The Great Trigonometrical principal stations fixed in the district are twelve in number.

Forest surveys.

An area of 716·43 square miles of forests was surveyed by No. 20 Party between the years 1881 and 1899.

Fisheries.

The fisheries of the Tharrawaddy District are very important; the average annual revenue from them amounts to considerably over two lakhs of rupees. Geographically the fisheries of the district fall into two classes, those in the Irrawaddy basin and those in the basin of the Myitmaka. The main streams of those two rivers form open fisheries but there are also 28 leased fisheries. Of these 28 are what are known as "myittan" fisheries, i.e., stretches of water lying inside islands and sand-banks, and these are

found both in the Irrawaddy and in the Myitmaka. A stretch of two and a half miles of the Myitmaka river is a leased fishery, the Paikin fishery, but this is exceptional and owes its existence as a leased fishery to the fact that there were frequent disputes between netmen. The other leased fisheries are ordinary inland lake and creek fisheries. The fisheries may be further subdivided into rainy season fisheries and dry weather fisheries. All the fisheries are fresh water and non-tidal and obtain water from the Irrawaddy, the Myitmaka and the streams which come down from the Pegu Yoma. The two most valuable are the Tabin *chaung* and the Kyabye fisheries which in 1904-05 sold for Rs. 12,880 and Rs. 6,750 respectively. The total fishery revenue in that year was Rs. 1,42,875 from rainy season fisheries and Rs. 57,765 from dry weather fisheries. In 1912-13 there was a large increase in the revenue because of the subdivision of some fisheries but in the third year after the subdivision the revenue fell again when the lessees had come to realise the real value of the fisheries.

The customary methods of catching fish may be noted. Methods and implements. The first is that employed in September when the flood waters begin to subside. Weirs with traps are erected across flowing streams and the fish passing down stream find their way into the mouths of the traps. Later as the waters subside the exits to the fisheries are closed, and hauling and casting nets are used to catch the fish. Fish are driven into confined spaces by means of screens of reed and bamboo to facilitate this. Eventually in the dry season the water is baled out from pools as they dry up and the fish are then caught in baskets or by hand. The usual implements are used in the district and the only two which deserve special mention are the "Ngamwedo-Hmyôn" and the *yaik*. The former is a cylindrical trap woven from strips of bamboo and is specially designed for the capture of the Ngamwedo (*Rhynchobdella aculeata*). It differs from other *hmyôns* in that there is no protection to keep the fish from passing out by the way it entered. No bait is placed inside the trap but some leaves are put in to form a sort of nest. The trap is placed in a horizontal position near a weir at the mouth of the creek. The length of the trap is about $2\frac{1}{2}$ cubits and its circumference about 2 cubits. The *yaik* is a basket made of bamboo, about ten cubits in circumference, and with a handle about 4 or 5 cubits long. The *yaik* is lowered into the water and left there for about five mintues when it is hauled up. It is used only by the poorest class of fisherman.

**Manu-
facture of
Ngapi.**

The manufacture of *ngapi* is an important industry. The "Tauntha" (pounded) *ngapi* of Tharrawaddy is better than that of the Delta districts and the reason is said to be that in Tharrawaddy the catches are not so large as in the Delta and consequently more care is taken in the preparation of *ngapi*. In making this *ngapi* the head and intestine of the fish are removed and the fish are then trampled with wooden slippers to remove the scales. The fish is then washed and placed in big bamboo baskets where it is covered with salt and pressed. Next morning it is dried in the sun and when thoroughly dry is pounded and stored in jars or bamboo baskets if jars are not procurable. The *ngapi* manufactured for sale is dried for only one day, but when making *ngapi* for his own consumption the fisherman dries it for three or four days before pounding it. The catches in the Delta are so large that it is impossible to get the labour to deal with *ngapi* in this way and the Delta manufacturers do not remove the intestines or dry the fish in the sun. Hence the *ngapi* made in the Delta is sold at a price about 30 per cent. below that of the *ngapi* made in Tharrawaddy.

Markets.

The Myitmaka fisheries are within easy reach of the railway and the local markets in the railway towns take practically the whole supply of both fresh and dried fish. The chief markets for the Irrawaddy fisheries are Monyo, Henzada, Myanaung and other towns on the river bank. Henzada District and the southern part of Prome District take so much of the fish and *ngapi* of Tharrawaddy that the latter district has to get supplies of *ngapi* for its own consumption from Ma-ubin District. The bulk of the fish of the district is taken to markets on the railway by hand and the remainder by cart, and to the riverine markets by boat.

**Leases
and
lessees.**

As a rule fisheries are put up to auction every year and the right to work them for a year goes to the highest bidder. Of recent years, however, in the case of certain fisheries where weeds have to be cleared and creeks deepened on an extensive scale, leases for three years have been granted. Fishery lessees are of course well-to-do. Few of them depend solely on fishing for a livelihood. Their coolies are hired for the season at market rates which are usually Rs. 50 for a rainy season's work and the same for a dry season's work with food. Coolies who can dive well are paid higher wages than these. The fisherman may be said to be just as well off as the average tenant cultivator.

Fishing shows no sign of decline in the district. There are occasional complaints against *haing* cultivators by the fishery lessees; but it cannot be said that cultivation has yet made any material difference to fisheries. Little change is likely for many years unless bunding of the left bank of the Irrawaddy is permitted. If this bank is bundled there will be a large decrease in the size of the fisheries in the Myitmaka basin owing to the extension of paddy cultivation which will follow.

CHAPTER X.

LOCAL SELF-GOVERNMENT.

The Thônzé Municipal Committee, within the limits of which Tharrawaddy town is included, was constituted in 1879, and the present consists of three *ex-officio* and nine *nominated* members. The *ex-officio* members are the Deputy Commissioner, the Subdivisional Officer and the Executive Engineer, Public Works Department. The Municipality was the successor of a town committee, which was established in 1883. In 1898 the Municipality began to collect a cart-tax and in the following year sanctioned an area-tax. In 1904-05 a new Municipal office was erected and a new dispensary, the old having been originally in the hands of the District Fund.

Letpadan had a town committee from 1887 onwards, which became a Municipality in 1894. In 1905-06 an artesian well was successfully bored, and in 1909-10 it was improved. This is said to have saved the town from annual visits of cholera. The town has developed considerably owing to its importance as a railway centre.

A town committee was established at Gyobingauk in 1883. By 1894 the population had greatly increased, and it became a Municipality in that year. Cart-tax was first levied in 1897-8, and scavenging-tax in 1900-1. There have always been difficulties about water-supply, and after an unsuccessful attempt in 1907-8 to bore a tube-well it was proposed to spend a large sum on a tank, but another attempt at boring was at length successful. The town has now the largest income of all the local bodies in this District.

There are town committees at Minhlā, Zīgōn, and Nattalin, more recently established.

Letpadan
Municipality.

Gyobin-
gauk
Muni-
cipality.

CHAPTER XI.

EDUCATION.

Literacy. According to the 1911 Census, of the District population 296 per 1,000 are literate; of a thousand males 508, of a thousand females 85, as against 484 and 62 at the preceding Census. It is more instructive to take the figures for adults, among whom of a thousand males 756, of a thousand females only 103 are literate as against 717 and 75 at the 1901 Census. Female education has clearly a long way to go. Of Buddhist males a slightly higher proportion is literate than of Christian males, of Buddhist females a much lower proportion than of Christian females. More Christian children are literate than Buddhist children. Among Mahomedans, 407 adult males per 1000 are literate: among Hindus only 243. The figure for Buddhists is 795. There are only 1,251 persons in the district who are literate in English.

Administration. Since 1912-13 the District has been divided into two sub-circles, owing to the rapid increase in the number of schools aided by Government. Salary grants to certificated teachers are paid by the District Cess Fund except within Municipal limits, where they are borne by the Town Funds. The Education Department has during recent years done much for technical education. The Roman Catholic Mission School at Thônzè is said to be far ahead of all others in this branch.

History. Not much is known of the early history of education in the District. The American Baptist Mission established a school at Thônzè in 1855, under which there are now six schools with about 300 pupils. In 1876 a mission was opened at Zigôn, where there is now an Anglo-Vernacular school with 295 pupils.

Karen education. Karen education is of course treated separately. Two or three years after the annexation the Henzada American Baptist Mission to Karens established schools in Tharrawaddy District, and there are now a number of village-schools besides the great High School at Tharrawaddy. Female education has been particularly encouraged, and though there is only one school for girls alone there are over 700 girls under instruction in public schools. Education is principally supported by subscriptions from the Karens themselves.

CHAPTER XII.

PUBLIC HEALTH.

(The compiler of this Gazetteer is indebted to the kindness of Mr. H. R. St. Clair Leonard, Civil Surgeon, Tharrawaddy, for most of this chapter.)

The Tharrawaddy District compares favourably in point of public health with the other districts of Lower Burma ; and the headquarters station Tharrawaddy is, if not the healthiest, at least as healthy as any, town in Lower Burma. It is notable that it has remained exceptionally free from epidemics when the rest of the district has been suffering from plague, cholera and small-pox. The absence of congested areas in the town, its comparatively small native population, as also its good general sanitary and conservancy arrangements accounts largely for its good bill of health. Even in regard to the commoner general diseases including malarial fevers, Tharrawaddy shows a comparative exemption. The same however cannot be said of the district as a whole ; there are parts of this district in which malarial fevers prevail to quite a large extent. With such diseases as ulcers, ophthalmia and worms the district suffers as badly as perhaps any other in the province.

General Health of Town and District.

Rules for the registration of births and deaths in towns were first issued in Burma in August 1865, but these did not apply to any towns in the Tharrawaddy District. The original introduction of the rules has not been traced, but it is recorded that in 1881-2 the registration of these statistics was less accurate in Tharrawaddy than in any other district ; and so the matter continued for some years. Probably the accuracy of the statistics now is much the same all over the Delta. The number of deaths is approximately correct, but in rural areas the classification of deaths cannot possibly be carried out accurately, as the registrars do not possess sufficient knowledge for a correct diagnosis of the causes of deaths. Usually deaths are shown in accordance with the most prominent symptom of the disease. In towns where the local Medical Officer verifies all deaths, the classification is much more reliable. In the towns with local government there are local rules for the registration of vital statistics ; these were introduced first into Zigón in 1895, then into Letpadan in 1897 ; Thônzè and Gyobingauk followed in 1898, Minhla in 1902 and Nattalin in 1911. The average annual birth-rate for these towns for the ten years 1904-13 is 32·23

Vital statistics.

per mille of the population, and for the whole district 38.3. The average annual death-rate for the same towns for the same ten years has been 39.6 *per mille*; the slight excess over 38.1, the average rate for towns in Lower Burma, is explained by the high death-rates prevailing in this district during 1905 due to cholera, during 1907, 1908, 1909 and 1910 to plague, and during 1912 to cholera and small-pox. The same explanation must be given of the excess of the corresponding average death-rate for the rural areas, which amounts to 27.7, over that for Lower Burma generally, which is 24.9. But some part of the excess is probably due to too high infantile mortality, that is of children under one year. For Lower Burma the rate of mortality of these children in 1912 was 218, and for urban Burma 334; but Gyobingauk town showed a rate of 442 and the other towns were probably not very different.

Malaria.

In point of importance among endemic diseases a review of the malarial conditions of this district should receive prior claim; its wide distribution and persistently malignant influence on the general health of the population demand special consideration. In this connection it would appear that even more important than collections of stagnant water is the dense jungle which is included in many village-tracts; since the thickly wooded submontane belt at the foot of the Yomas suffers most. Further it has been ascertained that in other parts of the district the villages which supply most of the malaria cases coming into the local hospitals are situated in tracts which are thickly wooded. It is not suggested that in the absence of large collections of water, marshes or stagnant pools, dense jungle is a causative factor of the presence of malaria. At most its influence is a fostering one, preventing the drying up of pools as rapidly as occurs in open stretches, and screening direct sunlight from the breeding grounds of the mosquito—conditions extremely favourable to the propagation of the anopheles. But in the early days of the district it was often stated in official reports in Tharrawaddy District that sites were particularly feverish during the first year after the jungle had been cleared.

Cholera.

In the earlier records of the district there is frequent mention of cholera outbreaks. In 1876-7 cholera was so bad at Gyobingauk that the railway station was closed. Outbreaks in 1878 at Kunhnaywa and Letpadan affected the location of the district headquarters. All the railway towns suffered that year. At Letpadan a small cholera hospital was built on the site of the present bazaar but not used; next year a plot 200 feet square was acquired for the

erection of a cholera hospital which it was proposed to build when required; a cholera shed was built in 1899-1900 but dismantled afterwards. In 1888 the disease was so prevalent* that it was assigned as one cause of the discontent which led to the rebellion in that year. Cholera indeed appeared nearly every year in all the towns until artesian wells were made or other steps taken to control the water supply. In 1908 a particularly serious epidemic of cholera originated at a *pöngyi-byan* at Tharrawaw through visitors at the ceremony drinking water from infected pools there. The disease appeared throughout the district. It broke out in January and had a recrudescence in April; in June the district seemed to be free but in July came a fresh and still more severe outbreak which reached its maximum in October and lasted till December. Aided by plague it raised the death rate in Zigon to 75.90, in Thonzè to 55.03 and in the whole district to 31.91, the total of deaths from cholera being 1,228. Attention was then directed to a scheme for supplying water in the towns by means of rain-water tanks; but artesian wells have since found more favour. In 1910 only two deaths from cholera in towns and eight in rural areas were reported; but 1912 witnessed another epidemic, chiefly in Gyobingauk, with 1,704 victims. Infection in these cases quickly spreads up or down the railway line, and into the rural neighbourhood. The towns of Thonzè, Tharrawaddy and Letpadan, which in recent years have obtained their water supply largely from deep wells, return the smallest figures; the headquarters town of Tharrawaddy indeed has been almost entirely free from cholera.

Plague was first recognised in 1905 and the death roll increased till 1908, since that time the figures have steadily diminished. The number of deaths each year is shown in the following table:—

Year	1905	1906	1907	1908	1909	1910	1911	1912	1913
Plague deaths.	43	168	419	620	483	255	179	29	97

Violent plague measures were given up after 1912; this may perhaps account for the increase in 1913. The mortality from plague in towns has been three times, and in 1907, 1908 five times, as great as in rural areas.

* One thousand one hundred and fifty-seven deaths reported from 17th March to 11th August but returns were incomplete.

Small-pox.

Small-pox varies greatly in intensity year by year in Tharrawaddy. In 1894 there was a bad outbreak, and another at the end of 1898 and beginning of 1899 when there were 1,737 deaths from this cause; in both cases the disease was prevalent all over Pegu Division. In 1908 there were only four and in 1909 only nine deaths from this cause. In 1910 began an outbreak which undoubtedly originated in inoculation and continued through 1911 into 1912. In 1911 there were 1,656 and in 1912 there were 1,106 fatal cases. It is impossible to say to what extent inoculation is practised in Tharrawaddy District, but there is strong suspicion that the practice is still carried on. It may be noted that inoculation has long been popular in this part of the province; in 1872 when one-third of the small-pox deaths of the province occurred in Myanaung District, it was found that inoculators had been active throughout that district which then included Tharrawaddy.

Vaccination.

The district has been backward in the matter of vaccination. In the first decade of British administration there were no vaccinations in Tharrawaddy at all, although the other districts obtained lymph from Simla and Calcutta and even brought over vaccinated children from the latter town. In 1863 the matter was taken up, especially in the Myanaung District by American Baptist Missionaries to whom Government supplied the lymph. There is no record of the results obtained by them either in Tharrawaddy or in the rest of the district; but it is recorded that in 1874 at the hospital at Henzada, then the headquarters of the district, where the same lymph was used, only 4 to 5 per cent. of the operations were successful. In 1881 lymph was given to native private practitioners; the system was said to have had good results, but one cannot help feeling sceptical about this. In 1884 the staff of vaccinators which had hitherto consisted of one vaccinator for a population of about 140,000 was trebled, but it required more organisation to have good results and it was some years before these were obtained. The Vaccination Act was introduced into Letpadan and Gyobingauk towns in 1897 and in the next year into Tharrawaddy and Thônzè, which were thus the last municipality in Burma existing at that time to accept the Act; in 1914 it was extended to Nattalin, Zigón and Minhlá.

In rural districts vaccination is still voluntary, and though instances of opposition to it occasionally arise, the people are generally favourably disposed towards it. It is extremely difficult to overcome deeply rooted ideas dependent on earlier customs, and though inoculation is punishable by law,

instances showing that it has been practised even in recent times are not wanting.

The district vaccination staff comprises a Native Superintendent of Vaccination and eight Vaccinators, working under the control of the Civil Surgeon of the district. Each vaccinator is in charge of one of the eight vaccinating circles into which the district has been divided. Reviewing the work done for the past ten years, the number of vaccinations and the successes obtained have shown generally a steady increase. In 1904-5, 14,862 operations were performed of which 12,403 were successful. In 1911-12, 20,316 operations were performed with 19,213 successes. Within the past few years greater prominence has been given to the importance of pushing on the vaccination work of this district, and efforts have been made to improve the supervision. The steady improvement in the figures, particularly since 1909, is due to this. The large number of vaccinations during 1911-12 was partly due to vigorous action taken in suppressing the epidemic of small-pox which was prevailing at that time. In comparison therefore a drop in the figures is noticeable for 1912-13 when 18,222 operations were performed with 17,205 successes. This decrease however was temporary; in 1913-14, 19,115 operations were performed with 18,114 successes.

Outside the towns of Letpadan, Thônzè and Tharrawaddy the people of the district obtain their water-supply from rivers, streams, ordinary wells or tanks. The first tube well in the district was made at Thônzè in 1902. In 1905 one was sunk at Tharrawaddy and another at Letpadan. The wells at Thônzè and Tharrawaddy have a distribution system and hydrants are placed at convenient distances throughout these towns; but the supply in Tharrawaddy is intermittent and insufficient, so that the people use water from a tank in the *kyauung* compound or the tank made in 1887. It is melancholy to compare the facts of this water-supply with the report of the site committee in 1878 which selected this station for headquarters.* The question of laying down pipes for Letpadan is under consideration, and steps for carrying this out are likely to be taken shortly. During 1914 a tube-well was sunk at Minhla and another at Gyobingauk, both however are still under process of construction and will not be in use till perhaps 1915.

The district has a large riverine front and most of the villages along the banks of the Irrawaddy depend for their

* See the General Administration Chapter.

water-supply on this river. Further inland as also in towns along the railway lines which are not in possession of tube-wells, tanks and ordinary surface wells and the streams are the sources of water-supply. Much cannot be said in favour of the wells. In regard both to the purity and the quantity of their supply they are unreliable. The majority of them are of faulty construction, ancient and in need of repair. In the towns, though some attention has been paid to the improvement of wells, it has not been thought advisable to expend much money in this direction as the water-supply of this district is notoriously bad. The majority of wells dry in the hot season and the supply when obtainable is hardly fit for human consumption. There are indications that each of the larger towns along railway lines will before long have its own tube-well; undoubtedly this is the only step which will overcome the water-supply difficulty in the important towns of the district.

Drainage.

Though there is no very advanced system of drainage in the district, a good deal has been done by means of roadside cuttings to favour the natural drainage of towns and larger villages. All the larger towns possess masonry drains in and around their bazaars. During periods of heavy rain the drainage of some of the towns and larger villages becomes a difficult if not an impossible problem. Places like Minhla, Okpo and Nattalin offer difficulties which to overcome would entail enormous engineering labour and expense. These stations occupy rather low lying ground and are, at least in part, submerged for two or three months during the year.

Conservancy.

Organised conservancy exists in all towns under Municipal or Town Committee control. The various staffs work under the supervision of a Sanitary Inspector and both day and night conservancy is carried out. The District Cess Fund maintains a staff in the larger villages along the railways lines, but only day work is carried out as those villages still use the cess-pit system. In most of the Municipal towns the double bucket system for the removal of night soil is followed, and all trenching grounds occupy positions at suitably remote distances from the inhabited portions. Litter and rubbish are removed by the day conservancy staff and are dumped on to waste land, where during the dry season they are burnt.

Prior to 1890 no organised conservancy existed in this district. It was for the first time introduced into Letpadan during that year. Gyobingauk followed in 1901, next Minhla in 1902, then Zigon in 1903, Thonzé in 1910, Nattalin in 1911, and Tharrawaddy in 1913. In villages the enforcement

of the rules laid down for village sanitation is in the hands of village headmen. Taken as a whole the villages in the district are fairly clean, and usually are proportionately so in inverse ratio to the number of cattle present.

Hospital accommodation was first provided for this district at Myanaung in 1865, that being then the district headquarters. But in 1873 a small hospital was opened at Yegin-Mingyi, the subdivisional headquarters, which immediately became popular; in 1873 there were 5 indoor and 487 outdoor patients, which increased in 1874 to 46 and 1,255, though the population of Mingyi town was only 1,200. In 1878 when Tharrawaddy became the headquarters the hospital there was put in hand at once. Both the Yegin and the Tharrawaddy hospital had separate "Dispensary funds" until 1897 when these were abolished and the closing balance transferred to the District Cess Fund which thereafter continued to maintain those institutions. In 1885 hospitals were opened at Thonzè and Gyobingauk, and in 1887 at Letpadan and at Zigôn. In 1897 the Yegyin hospital was transferred to Monyo as the latter place was more populous; in the same year a hospital at Tapun was erected but it could not be opened till 1898 because of the lack of a medical officer to take charge. Minhla hospital was opened in 1900. A contagious diseases ward was erected at Tharrawaddy in 1904, and a skeleton contagious diseases hospital at Zigôn in 1912. The hospitals at Tharrawaddy, Tapun and Monyo are still maintained by the District Cess Fund, the others by the local town funds. The district offers accommodation for 116 male and 29 female in-patients, the largest hospital being that at Tharrawaddy which has 39 beds for males and 12 for females. At the two outlying hospitals of Tapun and Monyo accommodation for 10 and 8 in-patients exist respectively; Thonzè has six beds, and the other hospitals under Municipal control offer accommodation ranging from 14 to 24 beds. There are no hospitals in the district set aside for the exclusive use of either the Civil or Military Police; these men can avail themselves of both in-door and out-door treatment at any of the hospitals above-mentioned.

A review of the work done in the hospitals of the district for the past ten years shows that in both the in-door and out-door departments a considerable increase in the number treated has taken place. In 1904, 1,934 in-door patients sought admission, and 74,836 out-door patients were relieved; whereas during 1913, 2,566 in-patients and 113,924 out-patients were treated. Malarial fevers, worms, ulcers, skin,

and eye diseases and bowel complaints were the commonest ailments treated.

CHAPTER XIII.

MINOR ARTICLES.

Tharrawaddy Town.

Tharrawaddy is the Headquarters of the Deputy Commissioner of the District, of the two Divisional Forest Officers (Tharrawaddy and Zigôn) and of the Executive Engineer, Public Works Department. It is 68 miles from Rangoon by the Irrawaddy Valley Railway, and 78 miles by road. The number of houses is 560. The town was founded about 38 years ago by Captain Forbes, then Deputy Commissioner, and is of little importance except officially: the trade centre is Thônzè, two miles south. Water is supplied from several large tanks and distributed by pipe to various parts of the town. There are numerous Government Officers, a Civil Hospital, a subsidiary Jail, and a small bazaar. There is a large and important Anglo-Vernacular High School maintained by the American Baptist Mission, mostly for Karen: there is also an Anglo-Vernacular Buddhist school. The main-road from Rangoon to Prome runs through the town, and there is a branch road (metalled) to Sanywe on the Myitmaka River, an important timber-floating station.

Tharrawaddy Subdivision.

One of the two subdivisions of the District, comprising the Tharrawaddy, Letpadan East, Letpadan West, Minhla East, and Minhla West Townships. The headquarters are at Tharrawaddy and it includes the whole of the southern part of the District.

Tharrawaddy Township.

The southernmost township of the District, bounded on the north by the Kyat *chaung*, on the west by the Thayet *chaung*, and on the south by the District boundary.

Thônzè.

A town 66 miles by rail from Rangoon, and 70 by road. It is situated on the Thônzè stream, an important affluent of the Myitmaka. There are 860 houses, a bazaar, a dispensary, a rice-mill, two printing-presses, several liquor shops, a municipal hospital, a police station, a Roman Catholic Mission with Anglo-Vernacular school, an American Baptist Mission school. Besides the main Rangoon-Prome road, which runs through it, there is a branch road running east to Sakangyi. The town is said to be about 200 years old. It is governed by Municipality, within the limits of which Tharrawaddy is included.

An old village of about 300 houses situated on the right bank of the Myitmaka River, about 72 miles from Rangoon and 7 miles from Tharrawaddy, with which it is connected by a ferry and a metalled road. There is a police-outpost and a small rice-mill. The place is important as a floating station for timber from the forests of the District, which comes down by the tributaries into the Myitmaka, and thence is sent on to Rangoon. Sanywe.

The central Township of the subdivision, bounded on the north by the Môkka and Ogwè *chaungs*, on the south by the Kyat *chaung*, on the east and west by the District boundary. Letpadan Township (East and West).

A town on the Rangoon-Prome Railway, 77 miles from Rangoon, and 9 miles north of Tharrawaddy, containing 1,439 houses, a municipal bazaar, a hospital, a court-house, a police-station, and several liquor shops: also a rice-mill and a saw-mill. The Rangoon-Prome main road runs two miles to the east: on the west of the town there is another road running north to Minhla. Letpadan is an important railway-centre and the junction for the Henzada-Kyangin-Bassein branch of the railway. Its local Government has been described in Chapter X. Letpadan.

A village on the railway-line, 85 miles from Rangoon and 17 miles from Tharrawaddy. It is said to be about 80 years old. It contains a bazaar, two liquor shops, a rice-mill and a saw-mill. The Rangoon-Prome road runs about two miles to the east, and there is a feeder-road to it: also one to the Letpadan-Minhla road, which runs about three miles to the west. Sitkwin.

The northernmost Township of the Tharrawaddy subdivision bounded on the north by the Gamôn and Myolé *chaungs*, on the west by the Myitmaka River, on the south by the Ogwè *chaung*, and on the east by the District boundary. Minhla Township (East and West).

A town on the Rangoon-Prome Railway, 91 miles north of Rangoon and 23 miles north of Tharrawaddy. It contains 296 houses, a court-house, a printing-press, a bazaar, several liquor shops, two rice-mills and a saw-mill. It is connected with the Rangoon-Prome road by a feeder-road: and with Letpadan by a separate road. Minhla.

A village on the Rangoon-Prome Railway, 96 miles from Rangoon and 28 miles from Tharrawaddy. It has a police-station, a bazaar, two liquor shops and a rice-mill. It is connected with the main Rangoon-Prome road by a feeder-road. There is a little pottery-work. Othégân.

A town on the Rangoon-Prome Railway, 102 miles from Rangoon, and 34 miles from Tharrawaddy. It has a Okpo.

Zigôn Sudivision. police-station, a bazaar, a saw-mill, a rice-mill, and several liquor shops. A feeder-road connects it with the main Rangoon-Prome road.

The northern subdivision of the District, consisting of the Gyobingauk, Zigôn, Nattalin and Monyo Townships, and bounded on the north by the Paungdè subdivision of the Prome District.

Gyôbin-gauk Township.

The southern township of the Zigôn subdivision, bounded on the north by the Zigôn Township, on the south by the Minhla Township, on the east by the District boundary, and on the west by the Monyo Township.

Gyôbin-gauk.

A town situated on the Rangoon-Prome Railway, 109 miles from Rangoon and 41 miles from Tharrawaddy. It is 7 miles south of Zigôn, the subdivisional headquarters. There are 1,049 houses, a court-house, a hospital, a municipal office, police-station, bazaar, pawnshop, opium shop, several liquor shops and a Roman Catholic Mission school. There are also three rice-mills and one saw-mill. Besides the Rangoon-Prome main road, there is a road running east to Myodwin, a road running west to Ywathaya, and a loop from this to Zigôn. The town is not ancient.

Zigôn Township.

A township recently formed out of the former Gyobingauk and Nattalin Townships.

Zigôn.

A town situated on the Rangoon-Prome Railway, 117 miles from Rangoon and 49 miles from Tharrawaddy. It is the headquarters of the Zigôn subdivision and of the Zigôn Township. It contains 847 houses, a court-house, a hospital, a police-station, a bazaar, a pawnshop, several liquor shops, four rice-mills, and an American Baptist Mission Anglo-Vernacular school. Besides the Rangoon-Prome road, which runs through the town, there are roads to Tapun (westward) and Kangyi (eastward), and also a loop to Gyobingauk.

Myôdwin.

A small village on the Myolè stream, 8 miles east of Gyobingauk, with which it is connected by a metalled Public Works Department road. There is a police-station and a forest bungalow. There are no industries of any importance. The village is said to have been founded by Thado-Min-Kaung about 400 years ago, and is believed to be the old city of Tharrawaddy. There is a ruined city-wall and an ancient pagoda.

Kunhnaywa.

A village situated on the east of the Rangoon-Prome Railway line, 2 miles north of Gyobingauk. There is one rice-mill. The village is ancient and contains a number of old fruit-trees, and an old pagoda called Badamyazedi. It is supposed that the village was founded about 400

years ago. The main Rangoon-Prome road runs near the village but on the western side of the railway line.

The northern township (formerly Tapun Township) of Zigôn subdivision, divided on the north from the Paungdè Township (Prome District) by the Taungnyo and Kônta streams, in the eastern hills bounded by the watershed, on the south by the Zigôn Township, and on the west by the Monyo Township.

A town on the Rangoon-Prome Railway, 124 miles from Rangoon and about 8 miles north of Zigôn, the subdisional headquarters. It has a Township office, bazaar, post-office, a police-station, three rice-mills, one saw-mill and three liquor-shops. There are three Vernacular schools, and an Anglo-Vernacular middle school. The Rangoon-Prome main road runs through the town, and there is a Public Works Department branch road to Tapun ($9\frac{1}{2}$ miles) in the west, and a District Cess Fund road to Dama-ngè ($7\frac{1}{2}$ miles) in the east.

Until 1910 the Township headquarters. It lies about 12 miles west of Zigôn, the subdisional headquarters, and contains a police-station, bazaar, opium shop and a Public Works Department rest-house. It is situated in the middle of an area heavily flooded by the Kantha stream and the Myitmaka, and much of the rice-land is uncultivated. Tapun is a Talaing word said to mean "four palm-trees" and the village is said to be an ancient one.

The western Township of the Zigôn subdivision, bounded on the east by the Irrawaddy, on the north by the Prome District, on the south by the Letpadan Township, and on the east by the Nattalin, Zigôn, and Gyobingauk Townships. It consists largely of heavily-flooded jungle, and contains no place of any importance.

Nattalin
Town-
ship.

Nattalin:

Tapun.

Monyo
Town-
ship.

APPENDICES.

APPENDIX I.

DEPUTY COMMISSIONERS OF THARRAWADDY SINCE 1878. (For earlier years see the text in Chapter IX.)

Deputy Commissioner.	From	To
Forbes, C. J. F. S.	19th June 1878	28th November 1879.
Midwinter, W. C.	15th December 1879	12th November 1880.
Hodgkinson, J. S.	13th November 1880	25th February 1881.
Midwinter, W. C.	26th February 1881	28th November 1882.
Plant, W. C. ...	...	...
Midwinter, W. C. ...	...	7th March 1886.
Hildebrand, A. H. ...	...	7th June 1886.
Mitchell, T. C. ...	8th March 1886	28th December 1886.
Hildebrand, A. H. ...	8th June 1886	17th January 1887.
Hall, W. T. ...	29th December 1886	21st February 1887.
Macrae, J. K. ...	18th January 1887	5th June 1887.
Hall, W. T. ...	22nd February 1887	3rd November 1887.
Adamson, H. ...	6th June 1887	19th April 1888.
Fleming, S. ...	4th November 1887	21st September 1889.
Todd-Naylor, H. P.	20th April 1888;	18th April 1890.
Eales, H. L. ...	22nd September 1889	3rd August 1890.
Maxwell, F. D. ...	19th April 1890	5th September 1890.
Bonus, R. ...	4th August 1890	16th April 1892.
Maxwell, F. D. ...	6th September 1890	28th July 1892.
Pritchard, A. B. ...	17th April 1892	29th November 1892.
Maxwell, F. D. ...	29th July 1892	3rd May 1893.
Hall, W. T. ...	30th November 1892	31st August 1893.
Thurston, J. N. O.	4th May 1893	2nd October 1893.
Twomey, H. R. ...	1st September 1893	28th February 1894.
Irwin, M. B. ...	3rd October 1893	6th April 1895.
Ross, D. ...	1st March 1894	2nd July 1897.
Cronin, J. J. ...	7th April 1895	23rd April 1898.
Eyre, G. S. ...	3rd July 1897	5th August 1898.
Shaw, G. W. ...	24th April 1898	18th November 1898.
Elliot, F. H. ...	23rd August 1898	1st April 1901.
Porter, W. N. ...	19th November 1898	24th May 1901.
Webb, C. M. ...	2nd April 1901	13th June 1901.
Porter, W. N. ...	25th May 1901	14th September 1901.
Webb, C. M. ...	14th June 1901	2nd March 1902.
Porter, W. N. ...	15th September 1901	11th April 1905.
Tuck, H. N. ...	3rd March 1902	25th July 1905.
Duckworth, E. D.	14th April 1905	26th November 1905.
Tuck, H. N. ...	26th July 1905	28th March 1906.
Arnold, G. F. ...	27th November 1905	16th August 1911.
Smyth, W. J. ...	26th April 1906	8th April 1912.
Obbard, O. J. ...	17th August 1911	...
Nethersole, F. R.	29th April 1912	

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APPENDIX TO CHAPTER III.

The Pegu Light Infantry Regiment was formed because it was found that the Madras and Bengal regiments used in the pacification of the Province suffered badly from the climate, and because the work to be done in Tharrawaddy District in suppressing Gaung Gyi required troops accustomed both to the climate and to the local physical conditions. The enrolment of the regiment was sanctioned by the Governor-General in Council on the 4th April 1853 when it was proposed that the regiment should consist of Burmese, Arakanese, Talaings and Karens with a few Malays, say 20 to each company. Malays had proved satisfactory in the Ceylon Rifles and, as it was understood that Burmans feared Malays more than any other race, it was thought they would be useful against Burmese marauders from over the border. The corps was not to be under the General Commanding in the Province but under the Commissioner. The strength was to be the same as that of the Arakan Battalion, and the enlistment was to be for general service.

Major Nuthall who was in command of the Arakan Battalion at the time was appointed to raise the Pegu Light Infantry Regiment and take command of it. In May 1853 he formulated definite proposals for its organisation which were accepted by Government. The main provisions were as follows:—

(1) The corps was to be designated the Pegu Light Infantry Regiment, to be formed for civil purposes but to be subject to all the Articles of War applicable to Native troops in the service of the East India Company and liable to military service whenever it might be ordered, by land or by sea.

(2) The men were to be enlisted as sappers and rowers, and whenever working in the former capacity in the field or in constructing Government works were to receive the usual allowance granted on such occasions to troops of the line.

(3) The headquarters were to be at such place as the Governor-General might direct.

(4) The corps was to be armed with percussion fusils. The uniform was to be green with black facings and accoutrements and silver mountings. In place of breast-plates each man to be provided with a bronze Lion's Head and Pricker in a case connected with a double chain. The

Early History.

Organisation.

Appendices.

waist belt to be fastened in front with a bronze snake clasp.

(5) Standing orders of the Bengal army to apply generally.

(6) The corps to be composed as follows:—

One captain receiving Rs. 230 *per mensem* in addition to his regimental pay and allowances.

One second-in-command with a consolidated pay of Rs. 500 *per mensem*. Five Subalterns including an Adjutant receiving Rs. 50 each *per mensem* in addition to regimental pay.

The Adjutant exclusive of regimental pay and allowance was to receive Rs. 220-14 *per mensem*. There were to be eight subadars at Rs. 30 *per mensem*, eight jemadars at Rs. 15, forty-eight havildars at Rs. 8, forty-eight naiks at Rs. 7, sixteen buglers at Rs. 6-8, and eight hundred sepoys on Rs. 7; the last were to get one rupee *per mensem* extra after twenty years' service and two rupees after twenty-seven years' but one rupee was deducted all through for equipment. For "batta in garrison" subadars received Rs. 10 *per mensem*, jemadars Rs. 5, havildars Rs. 3, naiks Rs. 2-8; buglers Rs. 2-8, sepoys Rs. 1; "on command" the last three classes received a further Rs. 2-8, havildars Rs. 3, jemadars Rs. 5 and subadars Rs. 10 *per mensem*. After twenty years pensions were obtainable at the rate of Rs. 18 *per mensem* for subadars, Rs. 10 for jemadars, Rs. 6 for havildars, Rs. 5 for naiks and Rs. 3-8 for buglers and sepoys. In addition there were to be an assistant surgeon on Rs. 215 *per mensem*, one sapper sergeant on Rs. 75-5-2, one sergeant-major on Rs. 70, one quarter-master sergeant on Rs. 65, two native doctors on Rs. 10 with Rs. 5 batta, one drill havildar on Rs. 5; one drill naik on Rs. 2-8; one bugle-major on Rs. 5; eight pay havildars on R. 5 each, four lascars on Rs. 7-8., one Burmese clerk on Rs. 20 and one schoolmaster on Rs. 20; also some miscellaneous coolies.

At the end of May, Nuthall having obtained no recruits in Rangoon—some critics said he did not try very hard—went to Prome and there called for recruits of any race living in the province of Pegu under 22 years of age. Several came and enquired about the conditions but none offered themselves for enrolment perhaps because there was no nucleus. Later 20 boys were persuaded to offer themselves. Of these seven were not fit physically, seven more declined to take the oath of allegiance. Nuthall decided to take his nucleus of six recruits to Rangoon hoping for more success there; but one of these deserted on

Difficulties of recruitment.

embarking at Prome, so then there were five. This was hardly encouraging but Nuthall persevered. Finding that part of the difficulty lay in the system of monthly payment he paid the men every four days; further, recruits were paid four annas *per* day for the broken period of their first month instead of the regulation two annas. Then 80 men offered themselves in a few days. Many of them were unfit for service; but they looked well as a nucleus so all were taken but none enrolled. They were useful in constructing barracks and it was proposed to weed them out afterwards. They went on strike for a pay of Rs. 10 *per* month almost at once. The example of Indian troops on Rs. 7-8 a month all round them was pointed out, and Nuthall made a great speech arguing that these men would not have agreed to come so far from their homes unless they had found service under the British satisfactory with Rs. 7-8 a month and glory. The recruits were not convinced and refused to work for the Rs. 8 fixed for them. They were accordingly dismissed; but in a few days all returned and asked to be re-enlisted. Nuthall seized the opportunity to weed them out and took back only those who suited him. As the re-enlistment came thus to be regarded as a favour he achieved a double object. In July 1853 however Nuthall himself pointed out to the Commissioner that the recruits had a real grievance. Coolies in India were paid Rs. 5-8 *per mensem* and the sepoys who had to keep-up various articles of half mountings were accordingly paid Rs. 7-8 there; in Burma where the usual cooly rate was Rs. 8 the men of the Pegu Light Infantry, who, after Re. 1 had been deducted for equipment, received only Rs. 7, were distinctly badly off. Government declined to increase the rates.

When he first began Nuthall asked to be allowed to take ten men from his former command, the Arakan Battalion, to be a nucleus. Later he found the Peguers, as he called them, more difficult to discipline than he had expected, and he increased his demand to 40 or 50. It is not clear from the records whether he ever actually got these men. There was some friction with Nuthall's successor in command of the Arakan Battalion who, fearing that Nuthall would entice away his best men, raised various objections to the procedure suggested for calling for volunteers for the new regiment. But that Nuthall eventually got the men is probable from the fact that he ceased to ask for them; he was not the man to subside in that way without getting what he wanted. He reported in July that he had 172 men who had taken the oath of allegiance promising to serve

Composition
of
the
Force.

three years, and to work as sappers, pioneers, builders, rowers, etc., whenever required to do so. By September he had 192 recruits, over 1,000 men having offered themselves, while many more were said to be ready to enlist if some advances were sent to them. Of local races only Karens and Shans were taken as yet, no Burmans or Talaings. The recruits at this time behaved well and submitted readily to discipline. They appear to have been employed building barracks in Rangoon. Spades and pickaxes were provided at first for sapper work, but these were soon changed to *dahs* and *mamooties* with the use of which the men were more familiar. On the 20th November 1853 the corps found its first employment on active service when a detachment landed some way up the Pegu River and hunted a party of dacoits for several days under peculiarly trying conditions. Success was only partial but the force earned the warm commendation of Major Nuthall. Soon after this the corps was warned to be ready to proceed to Yegin to quieten the Tharrawaddy District, and in January the move was made. Thereafter most of the recruits were obtained in the Tharrawaddy District or in Myanaung, but, at first at any rate, chiefly in the Sarawah Division. A proposal in January 1854 to increase the pay of privates in quarters to Rs. 9 was rejected; in April however this was granted and in August of the same year the pay of privates was raised to Rs. 10 in quarters (including "batta") and the pay of Non-Commissioned Officers increased at the same time. Engaged this year in the active pursuit of Gaung Gyi the men were frequently commended for good work; they showed themselves ready to suffer continued hardship and privation without complaint and exhibited great courage and daring in the actual conflicts. In 1855 owing to the difficulty of obtaining Karen and Shan recruits the Commissioner sanctioned the enlistment of Burmans and Talaings; but no avowed Talaing ever enlisted in the regiment. Towards the end of 1854 too steps had been taken to obtain Malays by sending a subaltern to Penang as a recruiting officer with a promise of some assistance from the authorities there. Early in 1855 some 70 Malays were brought up in this way and later some 51 more; still later in February 1856 twenty-one more arrived. These recruits soon earned the enthusiastic approval of Major Nuthall who found that the Malays did "not require the same ceaseless supervision as the Burmans to keep them in order; they were more trustworthy, took more care of their arms and accoutrements" and were, in his opinion, "the best men for an irregular

corps in this Province." Nuthall proposed to get more Malays so as to have one half Malays and one half local men. But Government limited the number of Malays to 200 men or two companies. To aid in recruiting them it was promised that "every respectable Malay bringing 50 recruits to the regiment should be admitted as a commissioned or non-commissioned officer." If the number of the Malay companies was not filled up they were to be made up with Burmese. The Burmese however did not please Nuthall so much at this time. He found them very good on active service but slack in cantonments, and in August 1855 said he had been extremely disappointed in them since they were withdrawn from active service in the field. As might be expected the Burman soldier failed to appreciate sentry duty or any of the routine of barrack life, and the records contain frequent complaints by the officers in this direction. Tradition too tells of a sentry set to watch a consignment of barrels of gunpowder which arrived at Yegin. Perhaps it was the recognition of the importance of this addition to a depleted store which kept the sentry at his post; he stayed there sitting on the barrels with a fidelity worthy of Casabianca till removed by the *force majeure* of the gunpowder. To beguile the time while performing this duty he had regaled himself with Burma cheroots, and readers accustomed to the manner in which the burning ends of these are apt to drop off will need no further description. The story certainly agrees with the character of the present generation in Tharrawaddy. It is to be noted that the Malays and the local recruits had frequent quarrels and were only kept together by the firm justice of Nuthall.

The corps on first arrival in Tharrawaddy District went to Yegin, but Myanaung was chosen almost at once for its headquarters. They went across to Myanaung but in October (1854) were ordered out again to Tapun and Paungdè. Meanwhile they had erected their barracks in Myanaung and they retained that post as headquarters till the end. In April (1855) the quarters at Myanaung and half the arms and accoutrements in spite of brave efforts to save them were destroyed by a fire which originated in a cook-house in the married quarters; new arms and accoutrements were supplied and permanent new quarters erected afterwards in 1856 at a cost of Rs. 1,330. In the same month of April detachments of the regiment, which had become well experienced in active service through the energetic operations in Tharrawaddy, were entrusted with two posts on the Anglo-Burman frontier north of Thayetmyo. At this time there were 450 sepoys in the

regiment ; and for twelve months April 1854 to March 1855 the cost of the regiment including the cost of enlisting Malays amounted to Rs. 1,03,424-14-8.

**Employ-
ment of
the force.**

After the suppression of Gaung Gyi the Pegu Light Infantry was chiefly employed on the frontier, and as garrisons at Henzada, Mingyi and Myanaung, the police force organised in 1854 taking over at the end of 1855 the posts at Tapun and Kunhnaywa which had till then been held by detachments of Native Infantry. In 1857 the regiment volunteered for service in Bengal against the mutineers. The Commissioner in Rangoon snubbed them for offering their services ; these he said were not theirs to offer ; they took their pay from Government and thereby their services become the property of Government ; if Government required to use those services orders would be issued ; till then it would be more becoming to perform properly the duties assigned to them. The Governor-General however, whom the Commissioner had forwarded the offer, received it in a more kindly spirit ; he said their services were not required but he desired the Commissioner to thank the regiment for its offer. It is not recorded whether this offer, emanated from the rank and file or whether it represented really only the British Officers of the corps.

**Magis-
trial pow-
ers of
Comman-
dant.**

About this time the Commandant was appointed Assistant Commissioner at Myanaung with certain judicial powers so that he might try cases there. He was paid Rs. 200 per mensem as a special allowance on this account but seems never to have done the work except occasionally when he desired to keep a case out of the ordinary courts. He excused himself on the plea that he could deal better with matters in cantonments under military disciplinary regulations, but the Chief Commissioner suspected that the work of a subordinate magistrate seemed derogatory to a Lieutenant Colonel, although the special allowance did not seem to possess the same fault. In 1860 an Assistant Commissioner at Myanaung was appointed and the Commandant deprived of the judicial powers and allowances.

**Strength,
Composi-
tion and
cost of the
Force in
1858.**

16 Native Commissioned Officers,
96 Native Non-Commissioned Officers,
16 Buglers,
800 Privates.

Total	...	<hr/>
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The regiment was composed exclusively of Burmese and Malays ; at this time it contained no Karens or Shans nor did it subsequently do so. The greater proportion of the Burmese recruits continued to be drawn from the area of the present Tharrawaddy District, and this was attributed by Major Nuthall to the "confidence and courage acquired by the people of that District in predatory habits during the Burmese time, and their consequent predilection for a Military life." The number of Malays at the end of 1857 was 154, but as it had been found increasingly difficult to obtain Malay recruits, and as the expense incurred had been large, the recruiting party in the Straits Settlements was withdrawn in July 1857. The cost to Government of each Malay recruit including bounty money, passage, and all expenses connected with the recruiting establishment but not the pay of the recruits was Rs. 64. The cost of regiment for 1857-8 was—

	Rs. A. P.
Pay and batta of the regiment ...	1,41,485 14 6
Expense of enlisting Malay recruits	2,141 3 10
Cost of buildings, etc.	2,624 15 3
Total ...	<u>1,46,252 1 7</u>

The item of Rs. 2,624-15-3 for buildings, etc., was expended in improving the Cantonment of Myanaung and completing the various buildings required by the Regiment. On Frontier Duty.

Owing to the great amount of sickness which prevailed among the detachments of Madras Native Infantry quartered on the frontier all the outposts in 1857-8 were garrisoned by the Pegu Light Infantry who were more suited to this work than were regiments of the line. But as the complement of European Officers allowed to the corps could not always be maintained at its full strength, there was the inconvenience that these outposts had frequently to be left under the command of Native officers. At the beginning of 1858 the regiment suffered an attack upon a small Guard which it had supplied, consisting of a Native officer, two non-commissioned officers and eight sepoys, to escort treasure and several sick sepoys from Thayetmyo to Mindôn. A band of robbers, about forty in number and well armed, fell upon this party whilst marching carelessly along in open day. They killed the Native officer, Havildar and a mahout, wounded a sepoy and succeeded in driving off the elephant upon which the treasure was carried. Although rapidly pursued by another party of the Pegu Light Infantry from Mindôn under Lieutenant Macdonald, they made good their retreat across the frontier

carrying with them all their booty except the elephant which was abandoned in the jungle. The planner of this exploit was afterwards found to be the noted Maung Hnaung, a dismissed Myoôk of Mindôn, well known for his plundering exploits in the Prome District.

In 1858-9 detachments of the Battalion were frequently actively employed in repelling incursions of bodies of men from Burmese territory. On such duty the men behaved well and by their cheerful quickness and readiness to move without tents or baggage showed that they were thoroughly adapted for the work required of them. It was thought that a greater proportion of the Malays would be an advantage, but these could not be obtained. No less than 82 Burmans deserted during the year, principally young soldiers of less than one year's service ; but they had been kept for a long time unrelieved at frontier posts. During the year there were two cases of Burmans robbing treasure under their charge and one instance of a small party on the march losing their arms from utter lack of care.

Encoun- ters with bandits.

Early in January 1860 a body of about 300 men under a well known bandit chief entered the Prome District from the Burmese territory and marched southward by the mountain paths intending to attack the wealthy town of Shwedaung. Captain D'Oyly with a party of the Pegu Light Infantry and police anticipating their design marched to that place ; and on the robbers retreating pursued them, capturing thirteen prisoners ; the others escaped by abandoning all their plunder. The general conduct and discipline of the regiment continued to be good ; desertions were only 58 this year as compared with 82 in the previous year. Some sixty deserters of this and the previous year were captured and punished and this checked the evil. But as the duty of the corps was chiefly to furnish detachments at outposts along the frontier situated in unhealthy and comparatively expensive localities the number of desertions is no matter for surprise. There was another instance of carelessness this year wherein the pay of a whole detachment and several muskets were carried off by bandits who attacked the outposts of Yemeik. At the end of 1860 the native officers, non-commissioned officers, rank and file at Myanaung numbered 425, at Kadinyatha 105, at Mindôn 78, at Kadinyatha 56, at Tabullah 107, at Zin, 22, on escort duty, sick leave, etc., 118 ; at Myanaung there were also five European officers, one surgeon and two European non-commissioned officers.

Disband- ment

In 1860 there was no presentiment that the force would soon be disbanded ; orders were issued for tunics of the

lighter material to be given to the men for the warm weather in lieu of the coarse cloth ones then worn. But in the following year on the Police Act V of 1861, coming into force an organised constabulary for the Province was established. The officers of the Pegu Light Infantry were then appointed to the police force in which many of the men also took service. The remainder were gradually disbanded. By the 30th April 1861 the number of privates was reduced to 328. Disbandment was finally carried out on the 18th August 1861. Two companies lingered on for 3½ months till the new constabulary was completed to guard the Jails at Henzada and Mingyi, and at the end of that task the regiment came to an end. The regimental buildings at Myanaung were converted into Court-houses and offices for the new district formed by the amalgamation of Henzada and Tharrawaddy.

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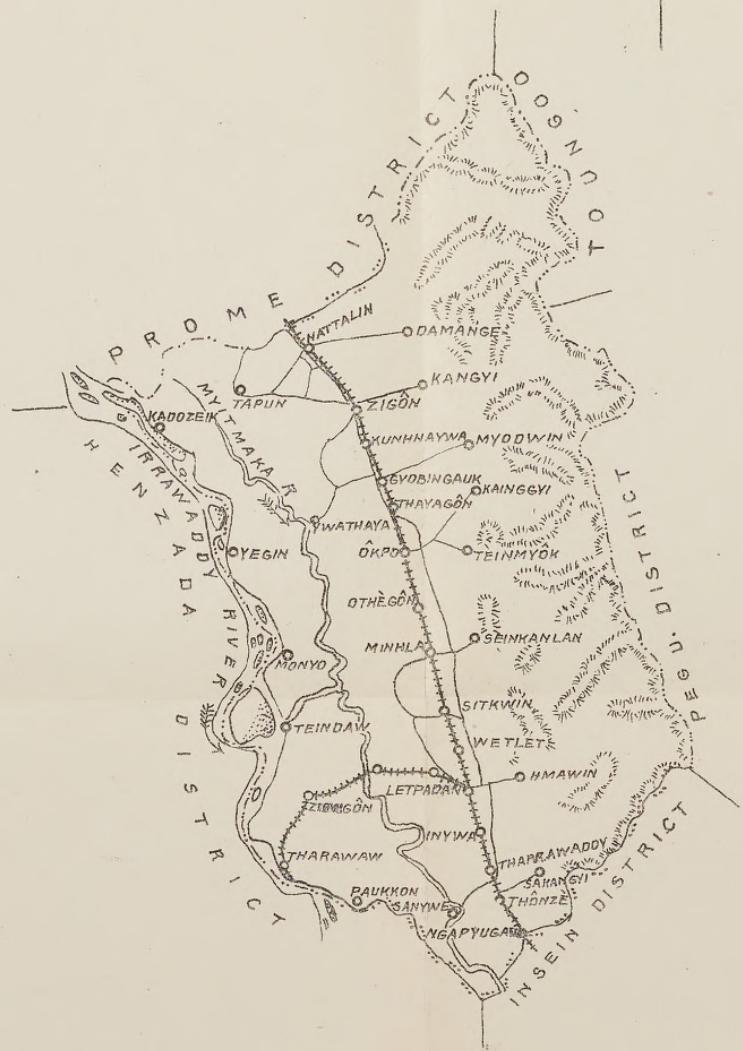
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MAP
OF
THARRAWADDY DISTRICT

Scale: 16 Miles 1 Inch.



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